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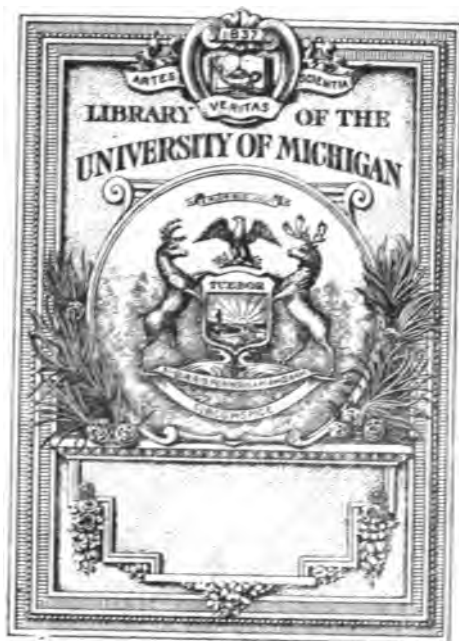
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THE LEWIS COLLECTION
OF GEMS AND RINGS

J. H. Middleton



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THE
LEWIS COLLECTION
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IN THE POSSESSION OF
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
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THE
LEWIS COLLECTION
OF GEMS AND RINGS

IN THE POSSESSION OF
CORPUS CHRISTI COLLEGE, CAMBRIDGE. *What follows
Christ Church Library Collection*

WITH AN

INTRODUCTORY ESSAY ON ANCIENT GEMS

BY
J. HENRY MIDDLETON,
SLADE PROFESSOR OF FINE ART, DIRECTOR OF THE FITZWILLIAM MUSEUM,
AND FELLOW OF KING'S COLLEGE, CAMBRIDGE;
AUTHOR OF "ANCIENT ROME IN 1888," "THE ENGRAVED GEMS OF CLASSICAL
TIMES, 1891," &c., &c.

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It should be observed that these illustrations represent in each case, not the *matrix*, but the *impression* from the gem.

PREFACE*.

THE large collection of engraved gems and rings which are described in the following catalogue was formed by the late Rev. Samuel Savage Lewis, M.A., Fellow of Corpus Christi College, Cambridge, during many years which he spent as an enthusiastic collector of ancient works of art of many different kinds †.

Many of these gems were acquired by Mr Lewis in the course of his frequent journeys into Italy, Greece and more distant Oriental countries. An inscription cut on the modern ring-setting of some of the gems records the place and the date of their acquisition.

A still larger proportion of the collection was purchased from various dealers in Smyrna, Naples, Paris and elsewhere, between whom and Mr Lewis a constant intercourse was kept up. Many times in the course of each year Mr Lewis received from these dealers parcels of gems which were sent to him on approval to select any which he might wish to buy.

For many years Mr C. W. King, whose valuable works on gems are mentioned at page 45, gave constant help to Mr Lewis in the formation of this collection by

* I have to thank the Syndics of the University Press for their kind permission to use seven wood-cuts of gems which had originally appeared in my work on *The engraved gems of classical times*, and also the Council of the Cambridge Antiquarian Society for the use of five cuts of gems in the Lewis collection, which had previously illustrated articles in the *Communications* of the Society.

† Mr Lewis was born in 1836: in 1869 he was elected to a Fellowship at Corpus Christi College, and from 1870 he held the office of Librarian. He died suddenly in 1891, having bequeathed to his college his whole collection of coins, gems, vases and other objects of antiquarian interest, together with a small but valuable library of books mostly dealing with archaeological subjects.

his sympathetic encouragement, his discriminating advice and in many other ways. The full value of this assistance can only be realized by those who were personally acquainted with Mr King's intense kindness of heart and wonderfully wide range of learning.

With regard to the general character of the collection it may be remarked that as a rule the gems are more remarkable for their interesting subjects than for any exceptional beauty as works of art.

Fine gems of the autonomous period of Greek art are almost wholly wanting from the collection, and by far the majority consist of examples of Roman work of Imperial date. Some of these are, however, works of much beauty and interest, as, for example the fine contemporary portraits of Nero and Poppaea (CLASS B, No. 79), and the very beautiful eikonic head of a Roman lady (CLASS B, No. 78).

Others, as is indicated in the following *Introduction*, are of great interest from the fact that they represent important works of Greek sculpture, and a large number of the gems are of value from the way in which they illustrate the myths and the ritual of classical times.

Among the gems with Christian devices one (CLASS A, No. 48), is of very exceptional beauty and importance, and another (CLASS E, No. 1), though very poor as a work of art, is of unusual interest from its supplying what is probably one of the earliest known representations of the Crucifixion of our Lord.

The Gnostic gems in this collection form an important part of the whole. Some of them, such as CLASS C, Nos. 14 and 17, are exceptionally fine and interesting examples of this curious class of amulets, and together with several others supply a valuable list of the mystic names of the Supreme Deity and the Angels of the

Aeons to which such strange magical virtues were attributed by the credulous and superstitious believers in the Gnostic Faith, which was a fanciful mixture of the Graeco-Roman, the Mithraic, the Jewish and the Christian religions.

In CLASS G, *cameos* (or gems cut in relief) there are several fine examples of the work of Italian artists of the Renaissance, when the keen revival of interest in all forms of classical learning and art led to the production of fine glyptic works, of antique style, designed with much grace and executed with an amount of technical skill which is hardly surpassed by that of the best Roman or Graeco-Roman engravers.

Among the ancient rings (CLASS J) there are several interesting specimens of antique metal-work. One heavy gold ring of late date (No. 16) is noticeable for its dedicatory inscription ἐν' ἀγαθῷ, followed by the name of the donor who hoped to receive a blessing in return for his offering.

Regarded as a whole this collection contains much that will be of value not only to the student of the glyptic art, but also to all who are interested in classical learning in the development of Christianity, in the mystic lore of the Gnostics or in the Renaissance of classical art; and the College of which Mr Lewis was a member may be congratulated on the possession of so large and in many respects so interesting a collection of engraved gems, including examples of many different periods and styles.

J. HENRY MIDDLETON.

KING'S COLLEGE, CAMBRIDGE.

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INTRODUCTORY ESSAY.

IN ancient times, owing to the fact that writing was either an unknown art or else was practised only by a few professional scribes or members of some sacred priesthood, hard stones engraved with a name, a badge, or some other device, were of special importance from their use as signets, the impressions of which in clay or wax gave that authenticity and authority to documents, such as royal decrees, contracts, private letters and the like, which at the present day is more usually conferred by a written signature. We frequently read of royal personages delegating their authority to a friend or an official, by lending him their signet, with permission to attach its seal to decrees, which thus gained the validity of a direct royal command. *Use of signets.*

The importance which the Greeks attached to signet gems is borne witness to by one of Solon's laws, promulgated about 600 B.C., which forbade gem-engravers (*δακτυλιογλύφοι*) to keep in their possession an impression of any gem they had sold, for fear lest they should be tempted to make another exactly like it for fraudulent purposes; see Diog. Laertius, i. 57. *Solon's law.*

One common form of fraud in ancient times seems to have been the manufacture of a fresh *matrix* by pressing on the seal of a document some soft composition, which afterward grew hard and allowed a fresh impression to be made from it exactly like that of the original seal. With the help of this the sealed letter might be broken open and then re-sealed by an unscrupulous person in such a way as to make detection almost impossible. *Modes of forgery.*

Hippolytus (*Refutatio omnium haeresium*, iv. 34) describes the best method of making and using these temporary signets, though he rather needlessly adds that he has hesitated to divulge

the process for fear lest evil-doers should make a bad use of his information.

*Materials
for moulds.*

One method, Hippolytus says, was to warm and knead together equal parts of pitch, resin, sulphur and asphalt. The seal on the document was then to be moistened with an oily tongue and the composition gently pressed upon it: when hard, this new matrix could be used to make a fresh seal.

Another method was to make a mixture of two parts of mastic-gum to one of dry asphalt, of wax and of resin from the pine-tree, adding, to give it hardness, a small proportion of finely powdered marble.

Somewhat similar directions for this fraudulent trick are given by Lucian, *Alex.* 21, who also mentions another method by which a seal could be cut off and then replaced on the letter which it had secured.

To provide against a letter being broken open and then re-sealed with a different signet it was not uncommon for writers of letters to mention at the end of their communication what the device was with which they were about to seal it; see Pliny, *Epis.* x. 74 (16).

*Greek
badges.*

In early times, both among the Greeks and the Romans, a special badge (*σῆμα* or *ἐπίσημον*) was adopted by each individual, and used both as a heraldic device on his shield and also on the signet which he used on written documents; see Aesch. *Sept. con. Theb.* 384 and 427.

This badge might be arbitrarily selected by its bearer, or it might have reference to his favourite deity, or again it might be of the nature of what, in heraldic language, is called "canting arms" (Fr. *parlant*).

*"Canting"
badge.*

Of this latter kind many examples are known, as, e.g. the custom of various members of the Roman Gens *Thoria*, who used as their badge a bull (*taurus*) on account of the resemblance in the sound of the two words.

A probable example of this is mentioned in the following catalogue, CLASS B, No. 167.

Among the Greeks it appears to have been more usual for each man to select an arbitrary badge. Of this we have examples in the celebrated inscribed bronze tablets from Heraklea in Magna Graecia, usually known as the *tabulae Heracleenses*, on

which is a long list of magistrates, the name of each being followed by that of his distinguishing badge, such as a bunch of grapes, an ear of wheat, a dolphin or some other object.

In many cases, however, the device on a signet gem had no special appropriateness or relation to its owner, and then it was not uncommon, especially in later times, for the initials or the full name of the owner to be added in a conspicuous place in the "field"* of the gem. *Owners' names.*

During the best Greek period this was rarely done, but owners' names occur very frequently on gems of Roman times. Many examples of this will be found in the following catalogue.

With regard to the shapes of signet gems it should be observed that the oldest known form of signet is the sacred scarabaeus beetle of ancient Egypt, examples of which exist dating from nearly 3800 years B.C. As a rule the Egyptian scarab is made either of soft steatite or of a paste hardened by fire, and therefore does not, strictly speaking, fall under the head of engraved *gems*. *Scarabs.*

In later times, however, signet gems made of carnelian, agate or chalcedony were largely cut either in the form of the Egyptian scarab or else in the modified scarab-shape which is now known as the scarabaeoid; see page 16, and *Catalogue*, CLASS D, No. 18, and *ib.* No. 3.

Next in point of antiquity come the cylinder signets of Assyria and Babylon, the oldest examples of which date, as far as is now known, from nearly 3000 years B.C. Of the cylinder signets only one example is contained in the Lewis collection (CLASS D, No. 1); this is a good and characteristic specimen, cut in hard steel-grey *haematite*. Its device, as is very commonly the case on these cylinders, represents a scene of worshippers adoring an enthroned figure of a deity—no doubt the special god whose cult commended itself the most to the owner of the signet. *Cylinders.*

Fig. 1 shows a very fine example of a cylinder of the oldest and artistically the finest class. The vigour of the action and the crisp precision of the modelling show an extraordinary amount of technical skill.

* The "field" of a gem is the flat, unengraved surface which forms the ground of the device.

One of the commonest subjects on the Assyrian and Babylonian cylinders and throughout the whole artistic productions

*Early
cylinder.*



FIG. 1. Impression from an early Babylonian cylinder of the finest style of about 2800 B.C.; with the name of the owner and his deity in cuneiform characters, between two representations (reversed) of the same subject—Gistubar strangling a lion: *real size*. The original is in the British Museum.

*Favourite
subject.*

of the Euphrates valley represents two winged deities or “cherubim” standing, one on each side of the conventionally treated sacred tree (Hôm). In one hand each figure holds a basket full of fruit, and with the other hand he applies a fruit to the branches of the sacred tree. The real meaning of this interesting and constantly recurring subject has only recently been pointed out by Dr E. B. Tylor of Oxford.

In order to secure a good crop of dates it was (and is still) an annual custom among the dwellers in the valley of the Great Rivers to shake on to the female palm trees pollen from the blossom of the male trees, thus ensuring the fertilization of the fruit. A custom of such importance for the welfare and food of the inhabitants naturally assumed a sacred character, and thus became a favourite subject for plastic art on a large scale as well as for the minute intaglios on the cylinder-signets.

*Mode of
wear.*

These cylinders are always pierced longitudinally, so as to receive a woollen cord by which the signet was fastened round the neck or the wrist of the owner. Mr Lewis' cylinder shows the marks of long wear and constant use, as the hard *haematite* is much worn down and the device blunted by the many impressions it has made.

*Method of
use.*

The method of using these cylinders was this—a lump of soft clay, or in some cases wax was laid on the document or other object which was to be sealed; the cylinder was then used to

roll out the lump into a flat tablet, which at the same time received the imprint of the device engraved on the cylinder.

The fine clay used for this purpose was called by the Greeks *Sealing clay*. γῆ σημαντρὶς (from σημαίνω to seal); see Herod. ii. 38. The same sort of clay was also used for scarabs and other forms of signet; Herodotus (*loc. cit.*) describes how the Egyptian priests used it to mark with their signets the victims which they had accepted as fit for sacrificial purposes.

It should be observed that signet gems of all classes were frequently used in ancient times not only to seal documents, but also to close the doors of rooms, the lids of caskets, the stoppers of wine amphorae and for many other similar purposes; see Aristoph. *Thesm.* 424—428; Pliny, *Hist. Nat.* xxxiii. 26; and Horace, *Epis.* II. ii. 134.

Various words are used by the Greeks to denote an engraved gem, which was primarily intended for a signet, and usually was set in a ring (δακτύλιος). Σφραγὶς, ψῆφος, δακτυλικὴ ψῆφος and ἡ λίθος (Latin *gemma*) are all employed with this meaning, though the last of these words did not necessarily imply an engraved stone; it might mean a simple jewel. An engraved gem set in a gold ring was also called σφραγὶς χρυσόδετος. The art of gem-engraving was called δακτυλιογλυφία or λιθουργική, and the act of engraving the gem was γλύφειν (Latin *scalpere*) whence we have the English phrase *glyptic* art. Collections of engraved gems were called δακτυλιοθήκαι (Latin *dactyliothecae*). The names of the tools used by gem-engravers (δακτυλιογλύφος or λιθογλύφος, Lat. *gemmarum sculptor*) are mentioned below, see page 30 seq.

Among the Greeks of early times, from about the twelfth to the ninth or eighth century B.C., the signet gems were mainly of a circular bean-like form, what are called *lenticular* gems, or else of an oblong oval shape like the lead bullets (*glandes*) used by Greek slingers and hence commonly known as *glandular* gems. *Earliest Greek gems.*

The devices on these archaic gems are usually animals, cut with varying degrees of spirit or clumsiness, and frequently designed in a conventional heraldic fashion; see fig. 6 on page 33.

These gems were first largely found in the Greek islands and therefore were called by archaeologists "island gems," but they *Island gems."*

have since been found at Mycenae, Spata, Baphion and other places on the mainland of Greece associated with objects of the Tirynthian and Mycenae type, and also, as at Baphion, with gold cups of very similar style but showing a later development than the very primitive works of art from Tiryns and Mycenae.

Oriental influence. They apparently belong to a more purely native strain of art development than the gems of the next period, the eighth and seventh centuries B.C., which by their scarab form and the style of their devices indicate a strongly-marked Egypto-Assyrian influence which to a large extent appears to have resulted from the extensive Phoenician trade with Greece, and also from



FIG. 2. Phoenician scarab of exceptionally delicate workmanship, dating probably from the 8th century B.C. The device consists of various sacred Egyptian and Assyrian symbols, arranged, without regard to meaning, simply as a decorative device. In the centre is the Egyptian god Horus seated on a lotus flower, between two winged cherubim of Assyrian style: at the top is the winged orb of the sun, the symbol of the sun-god Ra. *One and a half times full size.*

the establishment of the Greek trading colony of Naucratis in the Egyptian Delta.

Fig. 2 shows a characteristic example of a Phoenician scarab in the Ashmolean Museum at Oxford, cut in *carnelian*.

*Scara-
baeoid
gems.*

During the finest period of Greek art, from the sixth to the fourth century B.C., gems were mostly cut in what is called the scarabaeoid form; that is they have the general form of the Egyptian or Egypto-Phoenician scarab without the details of the beetle's wings and head being cut on the convex back.

Fig. 3 on page 28 illustrates a Greek scarabaeoid gem of the very finest class dating from the first half of the fifth century, B.C.

In the fourth century B.C. gem engravers began to use thinner slices of stone than the old scarabaeoid, and this shape lasted throughout the Roman period as the usual shape for gems of translucent character.

Some Roman gems are cut in the form of what may be called a reversed scarabaeoid; that is the back of the gem is flat and the front, on which the device is sunk, is convex or what would now be called cut *en cabochon*. In the case of *carbuncles* and other finely coloured transparent stones this thick rounded form increases both the richness of colour and the brilliance of the gem*.

To a certain extent true scarabs cut in *carnelian* or other hard stone were used by the Greeks till the fifth century B.C., but these gems were mostly of Phoenician workmanship, and have devices which combine in a decorative though meaningless manner the sacred symbols and deities of Egypt and Assyria. *Late use of scarabs.*

In Phoenician colonies, such as Tharros in the island of Sardinia, large numbers of these hard stone scarabs are found extending to as late a period as the third century B.C. CLASS D, No. 18 in the following catalogue supplies an example of this later kind of scarab.

Another large class of scarab-gems comes from the tombs of Etruria. Like Phoenician scarabs they are mostly cut in *carnelian*; but the devices on the flat side are not Oriental in style. In most cases the Etruscan scarabs, both in subject and design, show a strong Greek influence, and the finest of these scarabs, dating from the fifth and fourth centuries B.C., appear in many cases to be actually the work of Greek engravers, probably made expressly for the Etruscan market. *Etruscan scarabs.*

The method of setting scarab-gems for use in signet-rings was unlike that employed for the thinner forms of stone. The scarab is drilled longitudinally with a hole to receive a gold wire which formed part of the hoop of the ring and acted as a swivel on which the stone could revolve. *Setting of scarabs.*

When worn on the finger the scarab was turned with its flat side inwards, but when taken off to use as a seal the scarab

* Both the Greeks and the Romans, and in fact all gem-cutters down to the fifteenth century A.D., used the rounded *cabochon* form for all unengraved, ornamental jewels. The modern system of cutting jewels into many facets gives increased brilliance or "fire", but at the expense of depth and beauty of colour. As a rule, for decorative purposes the rounded form is best for any stone except the diamond. The gem-cutters of India and other Oriental countries still mainly adhere to the old system, and with excellent results.

was made to revolve so that the flat side with the engraved device was brought outwards.

*Period of
Alexander.*

During the Alexandrine period and later the character of Greek gems, like that of other works of art, changes very much; the type of figure becomes softer and more feminine in beauty, Homeric scenes are no longer represented, and deities such as Aphrodite or Dionysus, with subjects relating to the theatre or musical contests, become the favourite motives for representation.

*Graeco-
Roman
gems.*

Greek gems of this later period and good Graeco-Roman work of the time of the early Roman Empire are usually almost indistinguishable, either in workmanship or in subject. This is frequently the case even with large sculpture in marble, and with work so minute as that of the gem-engraver it is harder still to arrive at any certainty.

*Portraits
on gems.*

With the time of Alexander portraits appear for the first time on gems: a little earlier, that is, than the introduction of coin-portraits, which commence with the Diadochi, Seleucus I. King of Syria, and Ptolemy I. of Egypt. Lysimachus of Thrace used on his coins, instead of his own portrait, a magnificent head of the deified Alexander, an idealized portrait of the noblest type.

*Portrait of
Alexander.*

Though Alexander never committed the impiety of placing his own head in the place of that of a deity on his coins, he employed the celebrated Pyrgoteles to engrave it upon gems—using for that purpose an emerald, according to Pliny, *Hist. Nat.* XXXVII. 8*.

*Portraits
of the
Emperor.*

In Roman Imperial times portraits were very frequently cut on gems, especially that of the reigning Emperor, which was commonly worn by his courtiers as a compliment to him.

*Philo-
sophers.*

Portrait heads of Greek philosophers were also very largely worn by the Romans in their rings: Cicero (*De Fin.* v. 1) ridicules the Epicureans for their habit of using their master's head as a signet. Heads of Socrates and Plato are specially common on gems; see CLASS B, Nos. 70 and 71 in the following catalogue.

* For an account of Pyrgoteles and other ancient gem-engravers, see Middleton, *Engraved Gems*, chap. vi. and vii.

Pliny (*Hist. Nat.* XXXIII. 41) tells us that a portrait of Claudius in a gold ring was worn as a sort of entrance ticket by those privileged persons who had the right of access to the Imperial presence. *Courtiers' rings.*

The later Greek and Graeco-Roman gems are in many cases of exceptional value and interest from the fact that their device represents some important work of Greek sculpture—in some cases one which can be identified by descriptions as being some celebrated, but now lost statue or group. Thus, for example, a gem in the Lewis Collection, CLASS D, No. 19 appears to be copied from the famous bronze statue of Apollo holding a stag by its fore-legs, at Branchidae by the sculptor Kanachos of Sicyon, who worked in the early part of the fifth century B.C., see *Proceed. Soc. Ant.* 2nd series, Vol. XI. p. 253*. *Statues on gems. Apollo of Kanachos.*

CLASS B, No. 46 is interesting for its representation of the famous Victory of Samothrace and many other gems in the following catalogue are noted as showing the design of celebrated Greek or Graeco-Roman statues.

Another gem not in this Collection (Brit. Mus. No. 722) has a representation of the Apollo Sauroctonos of Praxiteles, of which several ancient copies exist both in bronze and marble; and (Brit. Mus. No. 790) a badly cut gem of late Roman date, is interesting for its group of Aphrodite and Ares with Eros at their feet—a noble Greek design of probably the third century B.C., of which more than one Roman copy in marble still exists†. *Mars and Venus.*

It should, however, be observed that gems which bear designs copied from important works of sculpture are in most cases productions of the Roman Imperial period, when the decay of good taste and judgment allowed designs to be cut on gems which were quite unsuited for such a purpose.

The reasons for this unsuitability are obvious; in the first place a design of high merit must be specially suited to the scale on which it is meant to be executed, and therefore no *Requisites of a gem design.*

* The finest extant representation of this celebrated statue is on an engraved paste gem in the collection of Mr A. J. Evans at Oxford.

† This is the motive of the group to which the Aphrodite of Melos is supposed by some writers to have belonged. The Capitoline Museum possesses a rather ludicrous copy, in which the heads of Ares and Aphrodite are replaced by those of Hadrian and his wife Sabina.

design could be greatly enlarged or diminished without a serious loss of beauty and fitness. Again, a gem design, being a variety of bas-relief, should be most strictly kept to one plane, quite unlike the natural composition of a piece of sculpture in the round; and, last of all, in copying a statue it was usually impossible to make the design occupy the field of the gem in that complete way which was thought so desirable by the engravers during the best period of Greek art.

*Greek
artists in
Rome.*

As is the case with the other arts, the best "Roman gems" are Greek either in design or workmanship, if not in both. The finest gems under the Empire were produced by Greek engravers, in some cases probably slaves or freedmen, or else by Romans who were Greeks by training.

There are however a very large number of gems of inferior style which can be called Roman in a fuller sense of the word. Under the Republic the use of engraved gems by the Romans seems to have been comparatively limited—partly, no doubt, on account of sumptuary laws, written and unwritten, like those which so strictly limited the *jus annuli aurei* during the early days of Rome.

*The ring
of Scipio.*

A very characteristic example of a Roman gem is that in a signet-ring (formerly in Lord Beverley's collection*) which can be dated about the year 300 B.C. owing to its having been found in the great *peperino* sarcophagus (now in the Vatican) of Lucius Cornelius Scipio Barbatus who was consul in 298 B.C. This is a gold ring set with a sard on which is cut, in a dry, wiry manner, a standing figure of Victory, winged and holding a palm-branch. The same figure treated in a similar way occurs on a very large number of Roman gems: CLASS B, No. 47 in the Lewis collection is a good typical example of the design, and of the style of the early Roman gem-engravers generally.

*Deities
on gems.*

The most frequently recurring subjects on Roman gems of this class are figures of Jupiter enthroned (see Lewis collection, CLASS B, Nos. 1 to 3) Minerva, Juno and other deities such as the Dioscuri, who were specially worshipped in Rome and are repre-

* This historical ring was inherited, with the rest of Lord Beverley's gems, by Mr Heber Percy, and has since been purchased by the Duke of Northumberland; it is preserved, with the rest of the Percy collection, at Alnwick Castle.

sented on the earliest of the Roman denarii. Another very favourite subject is the goddess Roma, enthroned—a type which was adapted from certain Greek representations of Athene, as, for example, that on the tetradrachms of Lysimachus with the head of the deified Alexander on the *obverse*; see Lewis collection, CLASS B, No. 55.

Most of the Roman deities are represented in forms taken from Greek art—Jupiter, Juno and Minerva, the great triad of early Latin worship, have the dress and the symbols of Zeus, Hera and Athene: and it only rarely happens that any deities are represented in a more native and un-Hellenic fashion. One of these exceptional cases of a native Italian deity, who sometimes occurs upon gems and coins of the republican period, is Juno Sospita with a serpent by her side, wearing a head-dress made of goat's skin—the special cultus-deity of Lanuvium. *Greek types.*
Latin deities.

Under the Roman empire, gems of all kinds, cut on a great variety of stones, and with every degree of excellence of workmanship, were extremely common.

Apart from the Graeco-Roman gems, which had little or nothing about them that was really Roman, the finest class is on the whole that with portrait heads either of the Emperor or some member of the Imperial family, or else that of the private owner of the gem; a large number of this latter class must have been engraved for wealthy Romans, judging from the frequent occurrence of well executed portraits, which cannot now be identified. Even these portraits of Romans are in many cases evidently the work of Greek artists, as their noble and refined treatment clearly shows; see CLASS B, Nos. 78 and 79. *Portrait gems.*

Under the Empire, as the old restrictions with regard to wearing rings gradually passed away, enormous quantities of cheap gems seem to have been engraved. Among the commonest subjects are single figures of the various deified abstractions, which the Romans invented very freely, and also adapted from the Greeks. *Cheap gems.*

Figures of *Salus* with her serpent, *Fortuna* with cornucopiae and rudder, *Abundantia*, *Indulgentia*, *Felicitas*, *Bonus Eventus* and many others are constantly repeated on the inferior Roman gems, in exactly the same forms as on the *reverses* of the Imperial denarii and aurei. The Lewis collection contains a *Roman deities.*

large number of this class of representation. The older deities, such as Jupiter, Juno, Minerva, Roma and others are no less common, and have the same close relation to the *reverse* types of Roman coins.

Grylli.

Another favourite Roman device for signet-gems is some form of what is usually called a *gryllus*, a composite monster made up with much ingenuity by joining together masks and various animals: see Lewis collection, CLASS C, Nos. 24 to 30.

Antiphilos.

According to Pliny (*Hist. Nat.* XXXV. 114) the famous Graeco-Egyptian painter Antiphilos, who executed a number of fine pictures which were brought to Rome to adorn the *Porticus* of Philip and that of Pompey in the Campus Martius, also painted a ludicrous figure known as the *Gryllus*. Hence, Pliny says, the name *grylli* was given to pictures of that comic class. The word also means a grass-hopper or a cricket. It is still used in modern Italian for fanciful and grotesque figures.

*Egyptian
deities.*

In the first century A.D. Pliny says (*Hist. Nat.* XXXIII. 41), the fashion came in to Rome of wearing gems engraved with a figure of Harpocrates or some other Egyptian deity. Among the many new sects which flourished under the Roman Empire, that of the worship of Isis and Serapis was the most popular; and even as early as the time of Augustus it was an important cult in Rome. A large number of Romano-Egyptian Gems now exist: see Lewis collection, CLASS B, Nos. 170 to 181. Figures of Horus or Harpocrates, the god of Silence, of which CLASS C, Nos. 1 to 4 and 12 in the same collection are good examples, were much used for signets, probably as a hint for discretion and silence with regard to the contents of the letter or other document that they were used to seal*.

*Astrologi-
cal gems.*

Astrological gems, engraved with a lucky horoscope, were also very largely used under the Roman Empire, when superstitions of all kinds were specially rife.

In the second and third centuries A.D. Mithraic and Gnostic types were very common; especially gems engraved with the mystic sun-god *Abraxas* and the Demiurgus *Cnoubis*: see Lewis collection, CLASS C, Nos. 1 to 23.

* A mediaeval analogy is the common type of seal engraved with the words "lecta tege: tecta lege."

These and many other devices were highly valued throughout the Imperial period as having talismanic or magical powers of protection and good luck;—the power of the talisman depending partly on the device, partly on the stone it was cut upon, and lastly on the season or planetary hour when the gem was engraved. Such gems were called by the Greeks *τετελεσμένοι* or *φαρμακῖται*, and *amuleta* by the Romans; see Pliny, *Hist. Nat.* XXXVII. 118. *Talismans and amulets.*

The Lewis collection is especially rich in gems of the Gnostic class, many of which are inscribed with mystic names and phrases of supposed magical power.

With regard to the dates of Roman gems, the finest, both in intaglio and in cameo, were produced under Greek influence, if not by Greek artists during the Augustan age. It is noticeable, as has been already remarked, that in many cases fine gems of the Roman Imperial period are engraved with copies of statues, whereas during the best Greek time the designs on gems were specially devised for glyptic purposes. During the Flavian period the work was, as a rule, inferior in style and coarser in execution*; but a few years later, in the time of Hadrian, there was a remarkable revival both of good taste and of technical skill, which came to a very sudden end about the close of the second century A.D. in the reign of Septimius Severus. *Various periods.*

The rapid decadence of all the fine arts, which took place during the second half of the second century A.D., appears to have been largely due to that fearful plague which devastated the Roman world in the reign of Marcus Aurelius; see Niebuhr, *Lectures on Ancient History*, Vol. ii. p. 53 seq. A very similar blow to the arts of England was given by the Black Death about the middle of the fourteenth century, but no other period quite equals the reign of Severus for the completeness and rapidity of the artistic decay which then commenced. *Effect of the plague.*

After that, the decadence of gem engraving, like that of the other arts, continued without intermission. Hence arose, in the third or fourth century, the not uncommon fashion of wear- *Coins set in rings.*

* The portrait of Julia the daughter of Titus by Euodos, in the Paris Bibliothèque, is a remarkable exception to this rule. This is a magnificent portrait head, cut on a large and brilliant *aquamarine*, a pale variety of the *beryl* or *emerald*.

ing in rings and other ornaments fine gold coins (*aurei*) of the earlier Emperors, instead of a badly engraved contemporary gem, a custom which was imitated by people of Celtic and Teutonic race in much later times.

This however did not bring the engraving of gems to an end: the art still was largely practised, though the old skill was lost, both in technique and design.

Byzantine period.

By the time of Constantine, at the beginning of the fourth century, gem engraving in Rome had, like all the other arts, sunk to its lowest ebb; and the craftsmen of Byzantium, skilful as they were in enamelling and working in the precious metals, seem not to have very largely developed the glyptic art, even during the wonderful outburst of technical skill and artistic excellence which took place in the time of Justinian, in the early part of the sixth century A.D.

Christian gems.

Christian gems of the Roman period are, as a rule, of very poor workmanship.

The commonest subjects are Christ the good Shepherd, represented after the old pagan types of Hermes Psychopompos or Orpheus playing to the listening beasts—subjects which frequently occur among the early Catacomb paintings. The Christian monogram P , the dove and olive branch, and other symbols of this kind were very often cut on gems of the fourth and fifth century; see Lewis collection, CLASS E.

One of Mr Lewis' gems (catalogued in CLASS A, No. 48) is a very exceptionally fine example of a gem with a Christian design; most gems of this type are very inferior as works of art to this remarkable *sard*.

Gems of the Sasanian period.

Sasanian Dynasty.

During the lowest period of artistic decadence in Rome, a great many large but feebly cut gems were executed in Persia under the successors of the Achaemenidae, from the third century A.D. down to the Moslem conquest of Persia in 632. The finest of these have portrait busts of the king, frequently a Shapur or a Hormizd, or of the Queen, with name and titles in Pehlevi characters. The name *Sasanian* is derived from a

man called *Sasan*, a supposed ancestor of Ardashir, the first king of this dynasty, who began to reign about 212 A.D. *Origin of name.*

In the Lewis collection, CLASS D, No. 16 is a specially fine example of a Sasanian royal portrait gem.

The Persian gems of this period are frequently large and decorative in style, though poor in the details of the design and coarsely cut. A great part of their beauty depends on the fact that usually they are cut on carnelian, rock crystal, amethyst or carbuncle of very fine and brilliant quality. In most cases the gems are convex, either in front or at the back. *Materials and forms of gems.*

The annular and the hemi-spherical forms were commonly used in Persia, even at this late period, especially when the material employed was chalcedony or bloodstone. The Lewis collection contains many examples of these late Persian signets executed at a period of extreme artistic decadence; see CLASS D, 4 to 14.

Cameos or gems cut in relief (ectypae).

In addition to the usual signet-gem with its device sunk (*intaglio di cavo*), there were, especially under the Roman Empire, a certain number of gems cut in relief, which were intended, not for impressing seals, but for use as ornaments. This is what is meant by the modern word *cameo**, a name which is probably of Arabic origin. Such works in relief were included by the Greeks under the name *τύποι ἐγγεγλυμμένοι*, and were called by the Romans *ectypae*—words, which, however, were applied to reliefs in metal and other materials as well as to cameo gems. *Gems cut in relief.*

Pliny (*Hist. Nat.* XXXVII. 173) describes certain stones as being especially suited for cameo cutting—"Gemmae quae ad ectypas sculpturas aptantur." One of the earliest examples of the mention of a ring-cameo by a classical author is in a passage of Seneca (*De Beneficiis*, III. 26), who speaks of a man wearing a cameo portrait of the Emperor—"Tiberii Caesaris imaginem ectypam atque eminente gemma."

The earliest cameos are mostly cut in sard, carnelian or some other stone of homogeneous colour, but the later cameos *Cameos in sard.*

* In mediaeval documents spelt also *camahutum*, *chamah*, *camaut*, *camahieu* and in many other ways.

of Roman date are mostly cut on some stratified stone, such as the onyx or sardonyx, in order that the design may be cut in one stratum, and be set off by having its background of another colour.

*Phalerae
cameos.*

One of the most important classes among the Roman cameos consists of large, full-faced heads, usually of Medusa or Jupiter, carved in a thick piece of onyx or chalcedony, and used to ornament the *phalerae* in the middle of the bronze cuirass of an emperor or general of an army. The Medusa's head was often inlaid in the *aegis* which formed a principal ornament on the Imperial cuirass. A very good example of this is contained in the Lewis collection, CLASS G, No. 1; it is perforated with holes for attachment to its bronze background.

Ancient collections of engraved gems (dactyliothecae).

Many of the wealthy Romans formed cabinets of engraved gems, containing examples both of antique and contemporary workmanship, but the gems which were thought worthy of the *dactyliotheca* were probably the work of Greek not Roman artists.

*Ring of
Polycrates.*

Pliny (*Hist. Nat.* XXXVII. 4) mentions the dedication by the Emperor Augustus in the Temple of Concord in the Roman Forum of a gold horn containing a sardonyx, popularly supposed to be the original gem which Polycrates, Tyrant of Samos, in vain threw into the sea to appease his Nemesis: older records however tell us that this celebrated stone, engraved by Theodorus of Samos, was an emerald; see Herod. III. 39 seq. The Temple of Concord contained an important collection of gems, among which the so-called "ring of Polycrates" made, Pliny tells us, but a poor figure.

*Gems of
Scaurus.*

The earliest gem collector, Pliny says (*Hist. Nat.* XXXVII. 11), was M. Aemilius Scaurus, the stepson of Sulla; a man of enormous wealth, whose temporary theatre, built during his aedile-ship in 58 B.C., was one of the costliest and largest buildings in Rome.

*Gems of
Pompey.*

The next collection of Greek gems brought to Rome was that which had belonged to Mithradates, and was dedicated in the Temple of Capitoline Jupiter by Pompey the Great, whose

victory and its consequent spoils created, Pliny says, the taste for gem-collecting in Rome (*Hist. Nat.* XXXVII. 12).

Pliny also mentions that Julius Caesar gave a collection of *Caesar's* ring-gems (*dactyliotheca*) to the temple of Venus Genitrix, which *gems.* he built in the centre of his new Forum Julium. Suetonius also tells us (*J. Caes.* 47) that Julius Caesar was always ready to give high prices for gems which were the work of any of the famous old Greek engravers.

Marcellus, the favourite nephew of Augustus, dedicated *Gems in* another collection of gems in the Temple of Apollo on the *the Temple* Palatine Hill—the most magnificent of the many public build- *of Apollo.* ings with which Augustus enriched the city of Rome; see Pliny, *Hist. Nat.* XXXVII. 11.

It was not, however, till comparatively late times that engraved gems were regarded as objects to place in a collection of works of art or even to set in jewellery as personal ornaments. Their real use was for long a purely practical one, *Seals used* that of signets, either to give authority to a document, or else, *as locks.* instead of a lock, to secure doors, box-lids and the like.

The styles and characteristics of antique gems.

With regard to the style of ancient gems it should be observed that the design on Greek gems of the best period is *Greek style.* always suited most exactly to the size and the shape of the stone it is cut upon. Great skill is shown in making the figure occupy as fully as possible the "field" or flat surface of the stone, so as to leave the least possible quantity of empty margin. In gems of archaic style, executed in the sixth century B.C., this principle is sometimes carried rather too far, and the figures are occasionally bent into somewhat strained attitudes in order to bring them within and yet close up to the curved limits of the field. But in the best work of the fifth and fourth centuries B.C. the highest skill and taste are shown in designing the composition so as to fall easily and gracefully within the necessary boundary lines.

Fig. 3 shows a good example of this, a Greek scarabaeoid *Finest* gem of the most beautiful workmanship and a perfect marvel of *period.* skill in the rendering of the muscles. It represents an archer

*Finest
style.*

feeling the point of one of his arrows. He wears long hair, tied up behind his head like the marble statues of athletes, which



FIG. 3. Greek scarabaeoid of the best period of art about 480—460 B.C., and of the finest workmanship: *one and a half times full size*. In a private collection.

have recently been found on the Athenian Acropolis among the débris caused by the Persian sack of Athens. The general design of the figure and the modelling of the nude flesh are magnificent in style, combining truth to nature with nobility of treatment in a way that could hardly be surpassed even in work on a much larger scale. As an example of largeness of style combined with extreme minuteness and accuracy of detail, nothing could surpass this wonderful scarabaeoid.

*Large
margin.*

Gems of the Roman period are very inferior in this respect to those of the best Greek engravers. As is the case with the Roman coin reverses, the design by no means always fills up or fits the stone on which it is cut. A considerable amount of plain margin is left, and this is also the case with gems of the Renaissance and modern times. Again the best Greek gems are remarkable for the delicacy of their "relief," the sinking being usually very slight and yet vigorous in effect, treated in the most skilful way, with admirable spirit and delicacy of touch. This shallowness or, more correctly, flatness of relief* (French *méplat*) is one of the most striking characteristics of early Greek intaglio and relief work of the best period. The figure is not treated like a statue sawn in half and then applied to a background, but, like the best Florentine reliefs of the 15th century, is modelled with a peculiar delicacy of surface, and more relief than actually exists is, as it were, suggested. In some cases the edges of the design are, what is called "stilted," that is

*Slight
sinking.*

*Stilted
intaglio.*

* The word 'relief' is used as referring to the impression from the gem, not to the intaglio itself.

to say the intaglio or relief outline is bounded by a flat rim at right angles to the ground, as if the whole figure had been slightly pushed out from behind, so that the depth of sinking at the outline is nearly as deep as in the central part of the figure.

Roman gems on the other hand are frequently very deeply cut, giving an excessive roundness of form in the impression, far inferior to the delicate sinking of the finest Greek gems.

It should also be observed that many Graeco-Roman and Roman gems are copied from some large work of sculpture, which is frequently quite unsuited for reproduction on a small scale; whereas fine Greek gems have their design exactly suited to the minute scale on which they are executed, and never look like a reduced copy of a larger work. *Copies of sculpture.*

Another point in which Roman gems are inferior to those of the Greeks is that they are sometimes treated in a *pictorial* manner, with an attempt to suggest different planes in the composition. This class of gem has often a too elaborate and crowded composition, unlike fine Greek gems, which are always simple in design and have, as a rule, not more than three figures at the most. In fact a single figure is most commonly used on Greek gems of the best period. *Pictorial style.*

In point of workmanship fine gems executed under the Roman Empire by Greek artists are equal to work of any period, especially in the case of portrait heads; but in purity of taste nothing can rival the gems of the Greek autonomous period—such work, for example as the nude hero which is illustrated in fig. 3. *Fine technique.*

It must not, however, be supposed that all Greek gems, even of the best period, are of this high quality of work. A large proportion are slight and even careless in execution, and in a great number of cases it is impossible, owing partly to a certain rudeness of execution, to be at all certain as to whether they are the work of the earlier Greek or of the Graeco-Roman period.

Such a gem as that shown in fig. 3 tells its own story with the utmost clearness, but it is often very difficult to arrive at any certainty as to the date and the workmanship of ancient gems. Coarseness of execution occasionally gives a look of greater antiquity than the gem really possesses, especially in the case of Roman gems; and the work of the most skilful copyists of the *Doubtful styles.*

eighteenth century is sometimes quite indistinguishable from that of an ancient Graeco-Roman artist.

Forgeries. In no other branch of art is it so difficult to distinguish the genuine antique from the modern forgery; partly because age does nothing to alter or decompose in any way the surface of a hard gem, and secondly because, owing to the hardness of the material and the laborious method of working it, there is necessarily something mechanical in the cut and bite of the graving tools, and this diminishes the prominence of the artist's personal peculiarities and touch.

Absence of Tests. Hence it happens that in many cases no archaeologist, however learned, can attain to real certainty about the age of a gem. A trustworthy test or criterion has not and probably never will be discovered.

Fortunately, however, imitations of antique gems are, as a rule, the work of forgers who break down in some point either of style or of technique; the requisite amount of antiquarian knowledge and manual skill being seldom combined in the same person.

A minute and careful study of many examples of ancient gems, especially those which from their known *provenance* are of undoubted antiquity, will enable the student by degrees to detect with a constantly increasing amount of certainty any forgeries except those which are of the most skilful kind.

Tools for gem-cutting. THE TECHNIQUE OF GEM-ENGRAVING (δακτυλιογλυφία* or λιθοουργική). The tools used by the ancient gem-engravers were mainly of three different sorts, namely the *drill*, the *wheel* and the "*diamond-point*†." In using all these the gem itself was firmly fixed in a bed of cement made of pitch and pounded pottery (*testae tunsae*). The tools were held in the engraver's hand, who thus had a greater freedom of touch than a modern

* The word γλύφειν is used by the Greeks for the process of engraving gems: hence the modern phrase "glyptic art." In Latin *scalpere* has the same meaning, but it is also used for other processes, such as carving in marble, equivalent, that is, to the word *sculpture*; see Pliny, *Hist. Nat.* xxxvi. 15.

† Some interesting details about gems and the methods of working them are given in a treatise written by Theophrastus about 315 B.C.; see Middleton, *Engraved gems*, p. 106.

gem-engraver, who usually works in the reverse way, having his drills and wheels fixed, and the gem loose in his hand.

I. THE DRILL (*τρούπανον*, hence mod. Italian *drepano*)* was *The drill.* worked in the old fashion, which still survives in Italy and in the East: the string of a small bow was wound round the stick of the drill, which was made to revolve by moving the bow rapidly backwards and forwards. The butt end of the drill revolved inside a cap or tube, which the engraver held in his hand, and so directed the point to the right place; he could not, of course, hold the drill by its revolving part.

Fig. 4, a very interesting Greek gem of the fifth century B.C. *Greek gem-cutter.* represents an engraver using the bow and drill on some small



FIG. 4. Gem in the British Museum which shows an engraver at work using the bow and drill. *Double full size.*

object, probably a gem, which is fixed to a table or stand. By it another drill is represented leaning against the wall.

It is only long practice that enables a workman to manage successfully the difficult task of carrying on simultaneously a distinct movement with each hand; so in some cases, especially *Sculptor's drill.* when working larger sculpture, an assistant worked the bow, leaving the engraver free to direct the point of the drill. This is indicated in some of the reliefs found in Egyptian tombs which represent sculptors at work on statues of porphyry or granite, materials of such hardness that they could only be worked by drills and emery.

In gem-engraving the point of the drill, which cut into the *Gem-cutter's drill,* stone, was of soft metal, usually bronze, and varied in size from

* The word *τόρνος* (Latin *tornus*) appears to be used for any revolving tool; thus it means both the *drill* and the *wheel* of the gem-engraver, as well as the *lathe* used in many different crafts.

χαλκευτὸν
τρύπανον.

that of an ordinary pin to a good sized knitting needle or even larger. The actual cutting of the drill was done, not by the metal, but by the fine emery powder (σμίρις, *Naxium*) which, mixed with oil, was kept constantly smeared upon it. The minute particles of emery, which is a form of *corundum*, stick in the soft metal under the pressure, and so give a steady cutting surface. If hard steel were used the emery powder would not adhere to the drill, and the cutting would go on much slower*. Even wood or bone in connection with emery will make an excellent drill. Some of the Hill-tribes of India even now drill quartz-crystal with a piece of bamboo and emery or sand and water, using the bow to make the drill revolve.

Wooden
drill.

Emery.

Pliny (*Hist. Nat.* XXXVI. 54) speaks of the *Naxium*, or emery of the island of Naxos, as being the best for cutting and polishing gems†.

He gives (*Hist. Nat.* XXXVII. 200) an interesting list of the different tools used in gem-engraving. Speaking of the varying hardness of stones, he says, "tanta differentia est ut aliae ferro scalpi non possint, aliae non nisi retunso, omnes autem adamante: plurimum vero in iis terebrarum proficit fervor."

Pliny on
gem-cut-
ting.

His meaning appears to be this—"only the softest signet-stones (such as steatite) can be engraved by the unaided iron graver; some require the (comparatively) blunt point of a metal drill (used with emery). All stones can be cut with the adamas-point (that is by diamond or sapphire); but the tool which is the most effective of all is the rapidly revolving drill."

Blunt
drill.

The blunt drill (*retunsum*) was specially used for blocking out roughly the figures on gems, which were afterwards completed and the details added with other tools. Some of the late Etruscan scarabs, executed at a period of decadence, have very little of this finishing work, and have merely rude figures almost wholly worked with the blunt drill. Fig. 5 gives a characteristic example of this class of scarab, which is usually cut in *carnelian*.

* It is for this reason that modern diamond-cutters use, not a steel, but a copper wheel for forming the facets when they are cutting a brilliant, rose- or table-diamond.

† The Naxian emery at the present day affords to the Greek government a revenue of more than £30,000 a year.

Another instrument used for straight cutting or slitting *Wire saw*. was a wire strung on a bow. The spring of the bow kept the



FIG. 5. Etruscan scarab mainly executed with the blunt drill. *Real size.*

wire taut while it was being drawn backwards and forwards with the usual supply of emery and oil, thus cutting like a saw into the gem. On a large scale this sort of wire saw (*serra*) was used by the Romans in cutting the thin slabs of coloured marble (*crustae*) used so much under the Empire for wall decoration. For the softer marbles, sharp sand and water were used instead of emery.

2. THE WHEEL (τόπος, *rotula*)*: this was a minute disc *The wheel*. of bronze which was set on a long, slender shaft of wood or metal and worked with a bow and tube like the drill; emery and oil being applied to it in the same way. The wheel cut, of course, at right angles to the shaft, not in the same direction as the drill did. According to the direction in which the workman moved the little wheel it could cut either a long line or a broad sunk surface†.

Fig. 6, a lenticular gem, in the British Museum, dating



FIG. 6. Early "lenticular" gem, showing the use of the wheel, the drill and the diamond-point. *Real size.* The material is *rock crystal*.

* See note, p. 31.

† This sort of wheel and the drill are both among the most important instruments of the modern dentist; but he uses hard steel, instead of copper and emery, having a less refractory substance to deal with.

probably from the thirteenth or the twelfth century B.C., allows the method of its execution to be clearly seen owing to the want of skill of its engraver, who has not softened down the harsh cuts of his wheel and drill. The eye, mouth and joints of this strange animal are each represented by a drill-sunk hole, and the mane on the neck is produced by a row of wheel-cut lines.

Wheel disc. Another kind of wheel was used in later times for quite a different purpose, namely for cutting slices of gems, *λιθοπίστης*. This was a very thin disc of metal, several inches in diameter, which was fixed as it revolved, the stone being pressed against its edge, like the circular saw of the modern timber-merchant. In this case, as with the other wheel, the actual cutting was done, not by the metal of the wheel, but by the emery and oil with which it was kept constantly charged.

Stone wheel. Another, quite different sort of wheel was used, not for engraving the designs on gems, but merely for shaping roughly the stone.

Cotes. This was a wheel made of fine whetstone, such as the black "Lydian jasper," shaped and fitted and supplied with water exactly like an ordinary grindstone for sharpening knives, but on a much smaller scale. It was probably worked with a treadle, like a lathe, and the gem was pressed against it as it revolved. The flat field of a signet gem and its rounded edges were probably, as a rule, formed with this instrument, the polishing being done afterwards with dry powdered ochre.

Adamas point. 3. THE DIAMOND-POINT: this tool was not used with the bow, but was held in the hand like a pencil, or like the "dry-point" of a modern etcher.

It consisted simply of a natural crystal of *adamas*, set in a bronze or iron handle. This instrument is mentioned in the Old Testament, *Ferem.* xvii. 1, "The sin of Judah is written with a pen of iron, with the point of a diamond." Pliny describes this tool in his paragraph on the *adamas* (*Hist. Nat.* XXXVII. 60), under which name is included both the true *diamond* and the white *sapphire*, which comes next to it in hardness.

He says—"expetuntur hae (crustae, chips) scalptoribus, ferroque includuntur nullam non duritiam ex facili cavantes."

The truth is that whole crystals, not *crustae*, have the best

cutting power, and it is probably these that were mostly used by gem engravers*.

Less hard substances than the *adamas* were used sometimes *Flint engravers.* in the same way. Herodotus (VII. 69) speaks of the Aethiopians pointing their arrows with the same sort of hard stone or flint that was used for engraving signets; λίθος ὁξύς πεποιημένος τῷ καὶ τὰς σφρηγίδας γλύφουσι. The steatite scarab-signets of Egypt are soft enough to be cut by obsidian or flint. Many arrows tipped with these stones have been found in Upper Egypt, and even in the tombs of Thebes.

Most of the details and all the artistic finish of a well *Finish of gems.* engraved gem was given by the use of the diamond-point, which allowed an amount of freedom of touch in the artist's hand far beyond what could be got with any of the other more mechanical *Use of diamond-point.* tools. It was however much more laborious to use it, and required great technical skill on the part of the engraver. By working over and over the same place with the point its scratchy lines could be got rid of, but on some of the gems of finest style and period the artist has not troubled to do this completely, and has left some of the original lines in a way that adds to the spirited beauty of the gem, though at a sacrifice of high finish. This is a point in which the mediaeval or modern forger is specially liable to fail; he is usually too careful to leave no trace of the actual tool-work.



FIG. 7. Head of Zeus, of finest Greek work, illustrating the use of the diamond point, especially for the hair. In the British Museum. *One and a half times full size.*

Fig. 7 shows a Greek gem of the finest style and period, *Finest style.* about the middle of the fifth century B.C. The delicate lines

* The modern glazier's diamond is always a natural crystal; a splintered or cut bit of diamond will readily scratch glass, but would not make the deep slit which is necessary to divide a sheet of glass neatly.

cut by the diamond point can be clearly distinguished in the hair and beard of this noble head. The material used is *green jasper*. It should be noticed that whole figures rather than heads most frequently occur on Greek gems of this early date.

The file.

4. THE FILE (*lima*): a very useful tool for smoothing level surfaces on gems, such as the flat field of a signet, was made by a mixture of emery and melted resin*; when hard this mixture has a very keen cutting power. This is probably the tool that Maecenas alludes to in his letter to Horace—

“Nec quos *Thynica lima* perpolivit

Anellos, neque jaspis lapillos.” *Anth. Lat.* I. p. 413.

As is mentioned by Pliny (*H. N.* xxxiv. 83) the *lima* was the tool held by the statue of the bronze-sculptor and gem-engraver Theodoros as a symbol of his craft.

5. THE FINAL POLISH: after the sunk design of an engraved gem was completed, it was necessary, both for the sake of its beauty, and also to prevent the wax or clay of the seal from adhering to it (see Pliny, *H. N.* xxxvii. 104), to polish, as completely as possible, the internal sunk part.

Method of polishing.

This was done in a laborious way by working the finest powder of some metallic oxide, such as haematite or ochreous earth, into all the depressions of the work with a soft point of wood, a bird's quill, or some other yielding and slightly elastic substance. The flat field of a gem was polished with much greater ease by rubbing it on the surface of woollen stuff sprinkled at first with emery and then finally with the finer powdered ochre. The revolving drum (*tympanum*) already mentioned was used for this purpose.

Pastegems.

THE TECHNIQUE OF “PASTE” GEMS, σφραγίδες ὑάλιναι. *Paste*†, which is only another word for the finest sort of glass, was made with great skill by most classical nations—especially by the Phoenicians, the Greeks and the Romans. In splendour of colour, in luminous texture, in hardness and durability, the ancient pastes are very superior to those made in modern times. One reason is that modern pastes or false jewels are largely composed of oxide of lead, the object being to increase the

* The modern method is to mix melted shell-lac and diamond dust.

† The materials used in making ancient pastes are mentioned below, see page 41.

"fire" or lustre of the paste, though at the expense of its hardness and durability. In ancient times, before the modern custom of facetting jewels had been invented, fine deep colour was the first requisite, and sparkle or lustre was but little regarded.

In making a paste signet the process was this—a mould *Moulding of pastes.* was made from an engraved gem by pressing it against a mixture of clay which had been ground in a mortar, together with a large proportion of finely powdered pottery, till it was a perfectly smooth, plastic and homogeneous mass. The clay mould, with the impression of the original intaglio in relief, was then carefully baked in a potter's kiln, and then a red-hot lump of the glass or paste, in a soft plastic state, was gently pressed upon the mould till it received the complete imprint of the original gem. If done carefully, by a skilful glass-worker, the result was an almost exact facsimile of the original intaglio.

When it had cooled, its ragged edges and the rough back *Wheel work.* were cut smooth and polished by the lapidary's wheel and emery powder, till it was ready for setting in a ring.

Paste signets (*σφραγίδες ὑάλιναι*) seem to have been made in great numbers for the poorer classes, both among the Greeks and the Romans of the Empire. As a rule they were not mounted in gold rings, but in silver, bronze or iron—in many cases the inferior metals were plated with gold*. The signets which cost only 3 obols (*Aristoph. Thesm.* 424: see p. 37) were probably paste copies, set in bronze.

Paste gems very frequently were set with a backing of *Foil backing.* polished metal, which, by reflecting the light through the paste, gave it increased brilliance and depth of colour.

The same method of setting was often adopted for real stones: Pliny (*Hist. Nat.* XXXVII. 106) speaking of one sort of *sard*, says "argenteis bratteis sublinuntur"; while *sards* of a different colour "brattea aurea sublinuntur." At *Hist. Nat.* XXXVII. 126, Pliny describes two methods of setting gems, either with an open bezel, or with a backing of gold-coloured

* In England and France, during the 14th and 15th centuries, it was usual for the jewellers' Guild in each town to have a rule prohibiting its members from setting *paste gems* in real gold, or *real gems* in plated metal.

foil—"hae funda includuntur perspicuae, ceteris subicitur aurichalcum."

*False
gems.*

A colourless paste or crystal was sometimes made to imitate a carbuncle by backing it with a crimson foil. Many other tricks were known to the ancient jewellers, and Pliny gives various directions how to tell true from false gems (see page 42).

*Bezels of
metal.*

METAL SIGNETS (δακτύλιοι ἄψηφοι or ἄλιθοι): those rings which have the device sunk in a *metal* bezel were formed in various ways. The finest have the design *cut* with tools in the same way as if they had been of stone. CLASS J, No. 1, supplies a good example of a signet-ring made wholly of pure gold. Others, especially the gold Etruscan rings, have the device *stamped* from a die on a thin plate of gold, which was then soldered by the goldsmith into its place on the ring.

Cast rings.

A third method, used for the cheaper class of bronze rings, was to *cast* the bezel in a relief mould; but this plan left the impression blunt and spiritless, unless afterwards touched up by tooling.

THE MATERIALS USED BY ANCIENT GEM-ENGRAVERS. The stones most frequently used by the ancient gem-engravers were some of the many forms of quartz (silica), either in the crystalline form or else in amorphous or sub-crystalline forms.

*Crystalline
quartz.*

The most important stone of all for glyptic purposes was the *sard* (Lat. *sarda*), a very fine, transparent, yellow crystalline variety of *quartz*; a slightly different variety which is of a deep red or orange-red colour is usually called *carnelian*, from *caro*, *carnis*, flesh.

Colourless quartz crystal was also used for gems, but not very commonly; see CLASS A, Nos. 4 and 36.

In Roman times a brilliant green variety of crystalline quartz was often used; this is called *plasma*, a corruption of *prasina*, leek-green; CLASS H, No. 36, supplies a specially fine example of the *plasma*. Less frequently a fine lemon-yellow quartz called *citrine* was used; see CLASS A, No. 7, and B, Nos. 5 and 144.

*Chal-
cedony.*

In all periods *chalcedony*, a sub-crystalline form of quartz, was largely used; *chalcedony* is translucent but not transparent; the finest kind is of a blue tint, and hence it is called *sapphirine chalcedony*. This beautiful stone is often used for gems of very

fine workmanship. Examples of it in the Lewis collection are CLASS A, Nos. 10 and 16, and B, No. 2.

Many stratified varieties of quartz were also largely used by the Roman gem-engravers, such as the *agate* (Lat. *achates*), *sardonyx*, *onyx* and *nicolo*, named from the Italian diminutive *onycolo*. *Stratified quartz.*

The *agate* consists of layers or strata of brown, white and yellow, or any two of these tints; the word is now used vaguely for many different varieties of stratified quartz. The *sardonyx*, as *Sardonyx*. its name implies, resembles a layer of *sard* applied on to a layer of *onyx*. The *onyx* usually consists of two layers, white and brown. A variety of the *onyx* called the *nicolo* also consists of *Nicolo*. two layers, one white and the other blue; see CLASS B, Nos. 8 and 39. This is probably the stone which Pliny (*Hist. Nat.* XXXVII. 148) calls *Aegyptilla* from its being largely found in Egypt. All these stratified forms of quartz, and above all the *sardonyx*, were valued very highly by the Romans, not only for signet-gems (in *intaglio*), but more especially for cameos or gems in relief, the design on which was cut in one light-coloured stratum, while another darker stratum formed the ground of the relief. CLASS G supplies several examples of this, though mostly of post-classical date.

The finest, however, of the antique cameos in the Lewis collection (CLASS G, No. 1) is cut in *chalcedony*, not in a stratified material, as is frequently the case with the large *phalerae* which were inserted in the breast of Roman cuirasses of Imperial date. *Cameo head.*

Some of the finest of these *phalerae* gems are cut in *amethyst* or in colourless rock crystal, which had a very splendid effect when it was backed with a highly reflective plate of gilt metal or foil. Others, on the other hand, are cut in *onyx* or *sardonyx*, having the face in a white layer set off by a background of dark brown or yellow.

What are now called "precious stones" were rarely used by ancient gem-engravers. The Lewis collection, however, possesses what appears to be an antique gem cut in *emerald* (Lat. *smaragdus*); see CLASS B, No. 108. *Precious stones.*

Other varieties of the *emerald*, such as the *beryl* and the *aquamarine*, occasionally occur among ancient gems of the Graeco-Roman or Roman period, but not very often. One of the finest of all ancient gems, the head of the Flavian Julia

signed by the engraver Euodos, is cut on a very beautiful *aquamarine* or pale green *beryl*; see page 23, note.

The *carbuncle* (Lat. *carbunculus*)* occurs less rarely than the *emerald*; and the *amethyst*, a purple variety of quartz, is not at all uncommon among Roman gems, especially for subjects of a Dionysiac type; see CLASS B, 119 and B, 22 and 140.

The very hard precious stones, such as the *diamond* (Lat. *adamas*), *ruby* (Lat. *anthrax*), and *sapphire*, were never used by the Greeks, and the last two only very rarely by Roman engravers.

Among the opaque stones which were used by ancient engravers the coloured varieties of amorphous silica are the most common, especially the fine blood-red *jasper* (Lat. *iaspis*), and the green *jasper* speckled with crimson, which is now known as the *bloodstone*. *Jaspers.* Jasper also occurs of many other colours, yellow, brown, grey, white and black. The *black jasper*, known as *Lydian stone*, was used by goldsmiths as a touch-stone, *cotricula*, to show the quality of gold by the colour of its streak marked upon the stone: see Pliny, *Hist. Nat.* XXXIII. 126. The red jasper appears to be what Pliny in one passage calls *haematites* (*Hist. Nat.* XXXVII. 169); but he elsewhere uses the same word for what is now called red *haematite*, an oxide of iron: see *H. N.* XXXVI. 129. Pliny tells us that one fine variety of jasper was called *σφραγίς*, as being *κατ' ἐξοχήν* the signet-stone; see *H. N.* XXXVII. 17.

Talismans.

These varieties of *jasper*, when engraved with certain devices, were believed to have great magical powers of bringing health and good fortune and of protecting the wearer against accident. For this reason they are very commonly used on gems of the Egypto-Roman and Gnostic classes, in combination with mystic words and symbols and especially with a figure of Serapis or some other Egyptian or Persian deity. *Amulets.* As Pliny tells us "Totus oriens pro amuleto gestare eas traditur," *H. N.* XXXVII. 118. Magical qualities were specially attributed to the green jasper, on which figures of Horus or Harpocrates were frequently engraved during the Imperial period: see CLASS C, No. 12, in the Lewis collection.

Magnetite and *haematite*, which consist chiefly of hard

* When the *carbuncle* is cut in a flat or faceted form it is called a *garnet*.

metallic oxides of iron, were used very frequently for Assyrian cylinders and for other signets of an early period. CLASS D, No. 1, affords a good example of the dark grey *haematite*. Like the red *jasper*, *haematite* is also occasionally used for late gems with devices of magical power.

On the whole the *sard* is the most beautiful stone and the *Sard*. one which occurs most frequently among ancient gems. Its beauty of colour and clear transparency make it especially effective when held up to receive transmitted light. Its hardness and toughness of grain give it great power both of receiving the most delicate engraving and of resisting wear. Moreover the *sard* was famous for the clear impression it gave and from the fact that the wax of the seal was not so liable to adhere to the gem as is the case with some other stones.

The special beauty of the *sard* when held up to the light can be seen in many of the gems of CLASS A, which are arranged to be seen by transmitted light.

Lapis lazuli, the *sappirus** of Pliny (*Hist. Nat.* XXXVII. 120), ^{*Lapis lazuli.*} was occasionally used for gems of the Roman Imperial period, and especially for those of Egyptian workmanship; see CLASS C, No. 1. The finest *lapis lazuli*, which came from Persia, is of a magnificent deep blue tint; it was of importance as being the substance from which the finest blue pigment (*cyaneus* or *ultra-cyaneus* *marine*) was made.

This pigment was quite unrivalled for the splendour of its colour and also for its durability, which made it available even for painting on fresh stucco (*fresco*). It was commonly sold for about its weight in gold, and that was the usual price which it fetched throughout the mediaeval period, when it was of great importance for all decorative wall painting.

Paste gems, *σφραγίδες ὑάλιναι*, *gemmae fictitiae* or *vitreae*, ^{*Paste gems.*} were made by the Greeks and Romans with very great skill. The material of which they were composed was a pure, hard glass, without any admixture of lead—what is now called “flint glass,” a pure alkaline silicate with the addition of lime. Roman pastes usually contain, in 100 parts, about 70 of *silica*, 18 of *soda*,

* The ancient name of the *sapphire* is doubtful; it appears to have been frequently included with the *diamond* under the name *adamas*. *Sappirus* appears always to mean *lapis lazuli*.

8 of *lime*, 2 of *alumina*, and small quantities of *metallic oxides*, to which the colour is due. Modern pastes are usually made with nearly 50 per cent. of oxide of lead; and they are therefore much softer and more liable to decomposition than the old ones. A fragment of an antique paste will scratch a modern one, as easily as rock crystal will scratch flint glass.

*Colours of
pastes.*

The colours of ancient pastes are often very magnificent, especially the ruby red, the sapphire blue, the emerald green, and the orange yellow. Ancient pastes in Italy are often bought by jewellers to sell, when cut in facets, as real gems. The chief pigments used to colour the ancient pastes were various metallic oxides and salts. Blue, green and ruby red were produced by different oxides and salts of *copper*. *Manganese* produced an amethyst-purple. Another blue was given by *cobalt*; yellow was produced by *carbon*.

Opaque white, used in making the white stratum of imitation onyx, was produced by *oxide of tin*. The various colours used for glass are mentioned by Pliny, *Hist. Nat.* XXXVI. 198.

*Tests for
gems and
pastes.*

Pliny gives directions for distinguishing between pastes and real gems (*Hist. Nat.* XXXVII. 198 to 200); the chief of these tests depend on the superior *hardness*, *weight* and *coldness* of the true gems.

*Backed
paste.*

A splinter of obsidian (natural volcanic glass) or a file will, he tells us, scratch a paste, but will not touch a real stone: unfortunately, he goes on to say, dealers in gems (*mangones gemmarum*) usually will not allow purchasers to put their stones to the scratching test (*limae probationem*); and if they did, there was always the risk of deception by means of a slice of real stone fitted at the back of the paste. Some good examples of ancient pastes are contained in CLASS F of the Lewis collection.

*Gold
signet.*

ANCIENT RINGS. Among the rings in the Lewis collection, CLASS J, some are of much interest, though they are mostly of late date. Unfortunately, as is usually the case, the engraved gems in these ancient rings are not remarkable for any beauty of workmanship. It is an extremely rare thing for a really fine gem to be found still fixed in its original ring-setting. No. 1 in the collection has been a very good specimen of a ring not set with a stone, but made wholly of gold (*δακτύλιος ἀψήφος*);

but it has unfortunately suffered much from long wear. No. 16, a massive gold hoop-ring, is of interest for its dedicatory inscription with the name of the donor.

Some of the ring-settings are good specimens of goldsmith's work under the late Empire, when the "shoulders" of the ring and the framing (*funda*) of the gem were treated in a somewhat elaborate way.

In earlier times, both among the Greeks and the Romans, it was the custom to set even the finest gems in rings of very plain design. In some cases the ring was costly from the massiveness of the gold hoop and "shoulders," but, almost invariably, it was left quite un-enriched by any of that delicate surface ornament which the Greek gold-smiths executed with such marvellous skill and taste. More commonly, however, the earlier gold rings were made hollow, of metal of thin substance, which had the advantage not only of making a good show at a moderate cost, but also, as Pliny points out (*Hist. Nat.* XXXIII. 25), diminished the risk of injury to the gem by its lightness in case of a fall. Examples of these hollow gold rings will be found in the Lewis collection, CLASS J, Nos. 7, 8 and 9.

In some cases these hollow rings were made to hold poison, as, for example, the ring, "Cannarum vindex," with which Hannibal is said to have committed suicide; see Juv. *Sat.* x. 164. Pliny tells us that the guardian (*aedituus*) of the Temple of Capitoline Jupiter killed himself with the poison in his ring when the gold, for which he was responsible, was stolen from its sacred treasury in the throne of the statue of Jupiter. This happened during the second* Consulship of Pompey the Great, and it was his colleague M. Licinius Crassus who is supposed to have been the robber; see Pliny, *H. N.* XXXIII. 15.

WORKS ON ANTIQUE GEMS.

A large number of the most valuable monographs on gems are scattered through the volumes of the chief archaeological periodicals of England, France, Germany and Italy; with the names of which classical students will be familiar.

* Not the third Consulship as Pliny states.

Books on gems of the 17th and 18th centuries are now of but little value except for the records they supply, showing, in certain cases, that a special gem is not, at least, one of quite modern production.

The chief works of this class are these :

- Agostini, *Gemme antiche figurate*, 2 Vols., Roma, 1686.
- De la Chausse, *Gemme antiche di Michelangelo Causeo de la Chausse*, Roma, 1700.
- Maffei, *Gemme antiche di Dom. de' Rossi colle sposizioni di P. A. Maffei*, Roma, 1707.
- Stosch, *Gemmae antiquae caelatae*, Amsterdam, 1724, and the same collection described by
- Winckelmann, *Pierres gravées du feu Baron de Stosch*, Florence, 1760.
- Zanetti, *Dactyliotheca*, Rome, 1747.
- Mariette, *Traité des pierres gravées*, Paris, 1750; and *Museum Odescalchum, sive thesaurus gemmarum*, Rome, 1751.
- Gori, *Museum Florentinum*, Florence, 1731—1762.
- Natter, *Traité des pierres gravées*, London, 1761.
- Gori, *Dactyliotheca Smithiana*, Venice, 1767.
- Worldge, *Antique gems*, London, 1768.
- Cipriani, *Drawings of 100 gems in the Marlborough Collection*, engraved by Bartolozzi, 2 Vols. folio, 1780—1791.
- Raspe, *Catalogue of gems cast in paste by James Tassie*, London, 1791.

Many other large and costly works with illustrations of antique gems were published in the 18th century, but the engravings of that time give little or no notion of the real character of the gems they represent, the main object of the artist being to give a pretty picture rather than a faithful copy.

Among more recent works the following should be referred to—

- Toelken, *Erklärendes Verzeichniss der antiken vertieft geschnittenen Steine*, Berlin, 1835.
- Köhler, *Gesammelte Schriften, herausgegeben von L. Stephani*, St Petersburg, 1850—1853.
- Panofka, *Gemmen mit Inschriften*, printed in *Abhandlungen der König. Akad. der Wissenschaften zu Berlin*, 1851, pp. 385—519.

Brunn, *Geschichte der Griechischen Künstler*, Brunswick, 1859, Vol. II. pp. 444—637; and new edition, 1889, Vol. II. pp. 303—433.

Chabouillet, *Catalogue des camées et pierres gravées de la Bibliothèque Impériale*, Paris, 1858.

Stephani and others, *Compte-rendu de la Commission Impériale Archéologique*, St Petersburg, 1860 to the present time; and, dealing with the same subject, *Antiquités du Bosphore Cimmérien*, St Petersburg, 1854.

Gerhard, *Gesammelte akademische Abhandlungen und kleine Schriften*, Berlin, 1866.

Müller-Wieseler, *Denkmäler der alten Kunst*, Theil II., Göttingen, 1869.

H. N. Story-Maskelyne, *Catalogue of the Marlborough gems*, privately printed, London, 1870.

Milchhoefer, *Die Anfänge der Kunst in Griechenland*, Leipzig, 1883, pp. 78 to 90.

Furtwängler and others, *Mykenische Vasen*, Berlin, 1886.

A. H. Smith, *Catalogue of gems in the British Museum*, with an Introduction by A. S. Murray, London, 1888.

J. H. Middleton, *The engraved gems of classical times*, Camb. Univ. Press, 1891.

A large number of interesting works on engraved gems of all kinds were written by the late Charles William King, M.A., Senior Fellow of Trinity College, Cambridge; and Mr King gave much assistance to Mr S. S. Lewis in the formation of his collection.

Mr King's chief works on gems were the following—*Antique gems*, 1866; *Precious Stones and Metals*, 1865; reprinted in Bohn's Series in 1883; *Handbook of engraved gems*, 1866; *Antique gems and rings*, 2 Vols. 1872; *The Gnostics and their remains*, enlarged edition, 1887. And also a large number of articles on gems published in the *Archaeological Journal*, Vols. XVIII., XIX., and others. All these works are full of valuable matter, and are written in the most interesting style.

ABSTRACT OF THE CATALOGUE

SHOWING THE NUMBER OF GEMS IN EACH CLASS.

CLASS A ; Gems fixed for transmitted light	48
CLASS B ; Gems of the Roman period	181
CLASS C ; Gnostic gems and Grylli	30
CLASS D ; Oriental gems	19
CLASS E ; Christian gems	8
CLASS F ; Paste gems	14
CLASS G ; Cameos	11
CLASS H ; Modern gems	36
CLASS J ; Antique rings	22
Total number of gems and rings	369

THE LEWIS GEMS.

CLASS A*.

GEMS FIXED FOR TRANSMITTED LIGHT.

I. DEITIES.

1. **Radiated head of Apollo Helios**; very fine Graeco-Roman work on *carneian*.

It was in comparatively late times that the god Apollo was identified with the sun-god and represented with rays of light round his head, as we see him on the coins of Rhodes of the third century B.C.

2. **Laureated head of Apollo** with long ringlets, of the late feminine type, boldly cut on *carneian*; unset.
3. **Standing figure of Apollo** playing on the lyre; his chlamys hangs from his shoulder leaving the body nude. This probably represents Apollo Musagetes, the companion and leader of the Muses. On *carneian*, unset.
4. **Statue of Abundantia or Fortuna** holding a cornucopiae and a rudder; the goddess stands in a small shrine or aedicula, in the pediment of which there is a dolphin. Minute but rude work on *quartz crystal*.
5. **Standing figure of Venus**, draped below the waist, holding in one hand a sceptre and in the other a corner of her drapery. Good work on orange-brown *sard*.
6. **Standing figure of Venus**, draped below the waist, holding in one hand a mirror and in the other a lock of her hair. Good work on orange *sard*.

* In the following catalogue every gem except some of the Gnostic amulets, unless otherwise described, is set in a modern ring. Gems in ancient ring settings are catalogued by themselves in CLASS J.

7. **A nude figure of Aphrodite** slipping a sandal on to one upraised foot; her knee rests against a cippus or short pillar. In the field is rudely cut ΑΦΡΟΔΙΤΗC. Slight work on a brilliant *citrine*.

This gem is copied from a Greek statue of the Praxitelean school of the fourth century B.C. The design is repeated in a great many extant statuettes.

8. **A Triton** wearing a crested helmet, holding in one hand a dolphin and in the other a trophy of arms. Good Graeco-Roman work on *carneian*.
9. **Full-faced bust of Cupid**, very finely and deeply cut on a rich golden-red *sard*.
10. **Cupid riding on a dolphin**; very finely cut on *sapphirine chalcedony*.
11. **Cupid seated on a rock**, playing with a dog; behind the dog is a tree; good work on dark orange *sard*.
12. **Nude figure of the youthful god Harpocrates** standing, with his finger on his lips, and holding a cornucopiae, which he rests on a short pillar. On dark orange *sard*. This device is evidently copied from a statue.
13. **Bust of Serapis**, full faced; by it a small figure of Isis, holding in one hand a situla or bucket for holy water, extends a wreath with the other hand towards the head of Serapis. Good work on orange *sard*.
On Serapis see CLASS B, No. 173.
14. The conventional representation of the **cultus statue of Diana of Ephesus**, on dark orange *sard*.
This famous statue was of an Oriental and un-Hellenic character. It represented the universal mother of all things that live upon the earth and had no real relationship to the Artemis of the Greeks or the Diana of the Romans.
15. **Bust of the Greek Artemis**, with bow and quiver slung over her shoulder; in front is a branch of a tree. Bold work on dark orange *sard*.
16. **Nude standing figure of Apollo** leaning against a tree at the foot of which his lyre is resting. Very fine Graeco-Roman work on *sapphirine chalcedony*. This design is evidently taken from a statue of Praxitelean type.

17. **Three conjugated heads of Diana between Castor and Pollux.** Over Diana's head is a crescent and over the Dioscuri are stars. Good work on brown *agate*.

18. **Rude standing figure of Abundantia** holding a cornucopiae; on orange *sard*.

19. **Standing figure of the three-formed Hecate**, with six hands; holding a torch in each; on *chalcedony*.

The triple form of Hecate indicates her power in heaven, on earth and in the realms under the earth.

20. **Draped standing figure of the Oriental bearded Dionysus** holding in one hand a thyrsus and in the other an oenochoe, from which he is pouring wine to a panther at his feet. Very fine work on dark orange *sard*.

This Oriental conception of Dionysus, said to have come from India, represents an effeminate, self-indulgent type of deity, devoted to excessive use of wine, and utterly unlike the nude, athletic type of figure by which the earlier Greeks represented the Hellenic Dionysus.

Nor had either of these types any original relationship to the stern chthonian Dionysus of the Mysteries, who, as Plutarch points out in his tract on Osiris, was simply the Hellenized form of the ancient Egyptian Osiris.

21. **Draped standing figure of the Dionysus of the Mysteries**, who is bearded and holds in one hand a long sceptre and in the other a bunch of wheat and poppies, which he extends over a small altar. Deeply cut on *chalcedony*. On the setting is engraved SMYRNA 1888.



No. 22; one and

a half times full size.

22. A very noble **standing figure of Athene** leaning on a large shield and holding a spear. Fine Graeco-Roman work on *carnelian*. This device is adapted from the Parthenon statue of Athene by Pheidias.

23. **Hermes Psychopompos**, as a nude bearded man holding a caduceus, raising from out of the grave a human soul in the form of a youth. In the field is cut FEL. Fine and interesting Graeco-Roman work on orange *sard*.
24. **Full-faced bust of Hermes**, of Praxitelean type; on one side is a caduceus and on the other an arrow and some cylindrical object. Very fine Graeco-Roman work on orange *sard*.

II. MISCELLANEOUS SUBJECTS.

25. **Battle of a Pygmy and a crane**; the Pygmy is nude, armed with a sword and shield. The exergual line is formed by a thyrsus. Good work on orange *sard*. On the setting is cut HERTZ-MAYER 15. 3. 1888.
26. **A Greek warrior** wearing only a chlamys and a crested helmet, holding a shield in one hand and a sword in the other, stands in front of a tall pillar on the top of which is a bird; a serpent is twined round the column, thus suggesting the notion that it is a sepulchral stele over a grave. Good work on *carnelian*.
27. **A wreath enclosing a palm branch**, on *sard*.
28. **An Amazon on horseback**, wearing the Phrygian cap and holding a double axe (*securis*). Minutely cut on *sard*.
29. **A cornucopiae** between a pomegranate and a palm branch; on *chalcidony*.
30. **A nude youth** leaning against a tree, playing on the pipes, rudely cut on *sard*.
31. **A draped female seated on the back of a centaur** who is blowing an arrow from a blow-tube (?). Rude work on brown orange *sard*.
32. **Nude figure of a dancing girl** playing on the double pipes; good work on brown *sard*.
33. **Silenus standing under a tree**, playing on the double pipes; in front of him is a Nymph, draped below the waist, bending in front of a statuette on a column. Coarse work on *chalcidony*.
34. **A youth seated on a rock** at the foot of a tree milking a goat, which holds in its mouth a branch of a tree. Coarse work on very pale *carnelian*; unset.

35. **Nude figure of Perseus standing**, holding in one hand the hooked sword (*harpe*) and in the other, upraised, the head of the Gorgon Medusa. In the field is cut P·VA·M., probably the name of the owner of the signet *Publius Valerius Maximus*. Fine but mannered work on orange *sard*.
36. Very fine **nude figure of Meleager** leaning against a short column or cippus, holding in one hand a spear. At the foot of the column is a hound, which looks up at his master. Well executed work of Graeco-Roman style cut on *quartz crystal*. The design is evidently copied from a Greek statue of noble style, resembling the Meleager of the Vatican Belvedere.
37. **A horned sheep standing**; over it is a star. Finely executed work on *chalcedony*.
38. **Betrothal or marriage signet**. Two draped figures, male and female, stand with clasped hands. On *plasma*.
39. **A large crater** with open lid out of which **a skeleton** is issuing. The skeleton leans over to touch a plant which is growing out of a tall vase. At the foot of the crater is a shield, spear and helmet. Of doubtful antiquity; minutely cut on brown *sard*. Fanciful, allegorical designs such as this were frequently produced during the Renaissance period.



No. 40; double full size.

40. **A draped winged figure of Victory** stands, reading from a scroll. Behind, in the field, is a club; and in front the owner's name EROS. Under the Roman Empire EROS was a common name for Greek slaves and freedmen. On olive-green *plasma*.

In the *Cambridge Antiquarian Society's Communications*, Vol. v., 1884—6, page 363—367, Mr C. W. King has published a paper on this gem, in which he points out that the club was used as a device on coins struck by Marc Antony to commemorate his supposed descent from Anthon, a son of Hercules; and that the Eros who owned this gem may possibly have been a freedman of the Antonian Gens—perhaps the same Eros who willingly died with his master when Marc Antony had determined that death was the only refuge left for him.

41. **Kneeling figure of a Greek warrior**, fully armed, holding a spear and a round shield decorated with a Gorgon's head. Of doubtful antiquity, on *carnelian*.
42. **A winged griffin** holding in its paws a circular object like a shield; in the field above is cut NCICIMHC. On orange *sard*.
43. **Heads of Commodus and the Empress Crispina** set facing each other. Good Roman work on *carnelian*.
44. **Three masks conjoined**. Two, placed back to back, are Tragic and Comic masks; above them is a third mask of the bearded Dionysus. Coarse work on pale *sard*. On the setting is cut CONSTANTINOPLE 1884.
45. **Standing figure of a warrior**, nude except for his helmet, holding a spear and shield. Coarse work on *sard*; unset.
46. **A female Sphinx seated**; in front is a caduceus; rudely cut on *chalcidony*. On the setting is inscribed SMYRNA 1888.
47. **The theft of the Palladium**. Diomedes, as a fully armed Greek warrior, holding spear and shield, seizes the sacred Trojan image of Athene, which stands on a large circular pedestal. Coarse work on yellow *sard*.
48. Very fine and large Christian gem of exceptionally good execution. **Christ the Good Shepherd** stands on an anchor, holding on His shoulders a horned sheep; at His feet are two lambs, and in the field on each side is a fish. Behind and extending over the figure of Christ is a tree, on the topmost branches of which three birds are seated. On a fine orange *sard*, chipped at the edges.

Said to have been found at Old Capua, and bought from a Neapolitan dealer by Mr Lewis in 1888.



No. 48; *the lines show the real size.*

The following notes on this very important Christian gem were originally written at Mr Lewis's request for the Cambridge Antiquarian Society.

In many cases Pagan motives were adopted by the early Christians for their representations of Christ. One of these, in which Christ is represented as the Good Shepherd, is taken from an early Greek design of Hermes Psychopompus; Hermes, that is, in the character of the conductor of souls to the realms of Hades.

In Greek Art Hermes Psychopompus is represented in various ways: in one of them, the original of the Good Shepherd type, he is shewn standing, and bearing on his shoulders a ram or sheep—typifying the soul of the dead person. This type is known as Hermes Criophorus—the Sheep-bearer; Pausanias mentions an early and very sacred Criophorus statue as existing in his time at Tanagra in Boeotia, the work of the celebrated Athenian sculptor Kalamis, c. 500—460 B.C.: see Paus. IX. 21. 1.

Many bronze statuettes of this group have been found in various places both in Greece and Italy. In other works of art Hermes Psychopompus is represented escorting the soul in human form to the banks of the Styx, where Charon the ferryman waits to carry the ghost over the dark stream. In this scene the soul is represented as a graceful human figure, with nothing to indicate that it is not a living person. This

motive occurs on some very beautiful terracotta reliefs, and also on some of the painted *lecythi* of Attica, and Eretria in Euboea. Some recently discovered *lecythi* in the Central Museum at Athens have a different method of representation of the soul, which occurs in the often repeated subject of mourners bringing offerings to the stele over the grave of a dead friend.

On these the soul is represented as a minute winged figure, hovering over the sepulchral stele, and extending its hands towards the friend or relation who is standing by the grave.

In Greek art Death was never treated in a horrible or painful way; and among the early Christians there was the same habit of avoiding any painful subjects in their painting and sculpture.

On the Sarcophagi and in the Catacomb paintings of the third and fourth centuries the scenes of Christ's life which are selected are those which illustrate His power or His beneficence, not His Death or Sufferings. In later times the case was very different, and scenes of horror and torture of every kind became the favourite subjects for the Mediaeval Artists.

If the personification of Death was represented in Greek Art, Death (Thanatos) was treated in a graceful way, either, as on the Attic *lecythi*, as a handsome bearded man bearing the corpse of the person commemorated, with the help of Sleep (Hypnos), who is represented as a similar winged figure, but without a beard; or, as on the sculptured column from Ephesus, as a beautiful winged youth, differing only from Eros in the fact that he is armed with a sword.

Another variety of the Good Shepherd type was taken by the early Christians from the Greek or Graeco-Roman conception of Orpheus. In some of the earliest Catacomb paintings this subject is adopted without any modification to suit its new meaning.

The Christ-Orpheus is represented as a youth wearing the Phrygian cap, seated, playing the lyre to a circle of listening beasts and reptiles of all sorts.

In later representations sheep only surround the seated figure, which thus becomes more distinctly that of the Good Shepherd.

On Mr Lewis's gem we have the more frequent Criophorus type of the Good Shepherd, which occurs in many forms in Christian Art of the third to the fifth century. It especially is found in the following connections: on the elaborate Sarcophagi reliefs of the third and fourth centuries; on the Catacomb paintings of the same date; on terra-cotta lamps; on rings and engraved gems; and on those curious glass vessels with pictures in gold leaf, of which so many examples have been discovered in the Catacombs of Rome and Naples. Figures in the round of this type are very rare. The most perfect example is a statuette of about half life size, which was found during the excavations of the lower Church of S. Clemente in Rome. This latter figure seems to date from the second half of the third century. It is closely similar in design to the figure on Mr Lewis' gem, but is inferior to it as a work of art, being, like all the sculpture of that date, clumsy in type and coarse in execution. This is one among many examples of skill in the lesser arts surviving long after the more important arts of painting and sculpture on a large scale had fallen into a state of decadence.

The workmanship, not only of gems, but also of coins and ivory reliefs is, in many cases, very good even during the period of the late Roman Empire.

Mr Lewis' signet-gem is a very beautiful sard, an oval of about one inch by $\frac{3}{4}$ inch wide, engraved with a figure of Christ, bearded, in short tunic and long boots; bearing a sheep with curved horns on His shoulders. He stands on an anchor, emblem of Faith; two lambs leap up towards Him. Behind Him is a tree, on which three birds are sitting. In the field are two fishes—the IXΘΥΣ being the well-known emblem of Christ.

In the *exergue*, below the anchor, is a small cross on a disc.

The workmanship is unusually fine, both in proportions and details. The design is pictorial in style, and an unusual amount of the field is unoccupied.

On the whole it is the finest gem of the kind I have ever seen. From its exceptionally fine workmanship it cannot be later than the fourth century, and, if the figure of Christ had not been bearded, I should have given it an earlier date. It

has unfortunately been damaged by re-polishing, which gives, at first sight, a dubious look to the gem.

In point of *technique* it is an interesting example of very skilful work with the wheel and the drill, as is described by Pliny (*H. N.* XXXVII. § 200), in an interesting passage which gives the various methods of work employed by gem-engravers, the most important being the use of tools driven by a bow and drill—"plurimum vero in iis terebrarum proficit fervor."

Perhaps the finest collection of gems of this type is that in the possession of Dr Drury Fortnum, who has written some interesting articles on them in the *Archaeological Journal*; see Vol. XXVI, page 137; Vol. XXVIII., page 266; Vol. XXIX., page 305; Vol. XXXIII., p. 111; and Vol. XLII., p. 159.

Dr Fortnum's collection includes many rings, either wholly of metal, or set with engraved gems, with figures of the Good Shepherd represented by the Orpheus and the Hermes Criophorus type.

The other Christian gems in the Lewis collection are catalogued below in CLASS E:

CLASS B.

ROMAN GEMS, MOSTLY OF IMPERIAL DATE.

I. DEITIES.

1. **Jupiter seated in a throne** with the left hand extended (as if to hold a figure of Victory) and holding a long sceptre (*hasta pura*) in his right hand, rudely cut in *chalcedony*. This type is derived from the statue of Zeus by Pheidias at Olympia, probably not at first hand, but indirectly from the *reverse* of a Greek coin such as the common tetradrachms of Alexander the Great. The setting is inscribed CHERCHELL XMAS 1888.
2. **Jupiter enthroned**; similar design to No. 1, rudely cut on pale *sapphirine chalcedony*.
3. **Jupiter enthroned** holding a long sceptre in one hand and an eagle in the other (Zeus aetophoros); in the field is a

crescent moon and two stars. Rude Roman work on pale striated *carnelian*. Unset.

4, 5 and 6. Three gems set on the hoop of one ring*.

4. **Standing figure of Jupiter** holding in one hand a long sceptre and in the other a patera ; at his feet is an eagle. Rude work on dark green *jasper*.

5. **Standing figure of Minerva** leaning on her shield and holding a spear ; coarse work on *citrine*. This type is derived from the chryselephantine statue of Athene by Pheidias in the Athenian Parthenon.

6. **Helmeted figure of Mars** seated on a heap of armour, and holding a statuette of Victory in his outstretched hand. Coarse work on *red jasper*.

7. **Standing figures of Jupiter** holding sceptre and thunderbolt, **Diana** holding a branch and **Minerva** holding spear and shield. Good work on *carnelian*.

8. **Seated figure of Hygeia** ; in front of her is a tripod on a rock, and a tree round which a serpent is twined. Coarse work on *nicolo*.

Hygeia or Salus was originally merely the abstract conception of health. In later times she was personified as the daughter of Aesculapius, while the state of convalescence after illness was personified as a son of Aesculapius named Telesphorus.

9, 10 and 11 are set in one ring.

9. **Standing figure of Mercury** holding in one hand a caduceus and in the other a purse and a cock, his usual Roman emblems. At his feet is a ram, and in the field is a scorpion and a mouse (?). Coarsely cut on *chalcodony*.

10. **The cultus statue of the Oriental Diana of Ephesus** : at her feet are two stags and in the field above is a star and a crescent moon. *Carnelian*. See above, CLASS A, No. 14.

11. **Small laureated head of Apollo**. Rude work on *carnelian*.

*.A considerable number of the Lewis gems are mounted in groups of three, and this, of course, occasionally interferes with the scheme of classification which has been adopted in this catalogue.

12. **Nude figure of Mercury riding on a ram**: he holds in one hand a purse and in the other a caduceus. In the field in front of the ram is a cock. Very fine work on *carnelian*. The cut shows it $1\frac{1}{2}$ times the real size.



13. **Nude standing figure of Mercury** holding in one hand a caduceus and in the other a purse; at his feet is a ram. Rude work on *carnelian*.
14. **Nude figure of Mercury seated on a rock**, holding a caduceus; at his feet is a cock. Coarse work on red *jasper*.
15. **Mercury alighting from a flight through the air**; he holds a caduceus in his left hand, and wears the petasus and winged sandals. On orange *sard*.
16. **Mercury standing**, holding a caduceus in one hand and a purse in the other. A chlamys is hung over his right arm. Dark *carnelian*.
17. **Mercury**, nude, except for a chlamys on his right arm, offers a wreath to the statue of Diana of Ephesus, represented as on No. 10, with a star and moon in the field. Mercury holds the caduceus in his right hand. Minutely cut on *carnelian* clouded with white. The gold setting is inscribed SMYRNA 1890.
18. **Nude figure of Venus Anadyomene**, wringing the water from her long hair with both hands. Minutely cut on a *carbuncle*, the back of which is hollowed to receive a piece of metallic foil (*brattea*). Of doubtful antiquity.
19. **Aphrodite Epitragia** riding over the sea on a ram. Her veil is blown over her head. In front and behind the ram is a flying Cupid. Minute work on clouded *carnelian*. The gold setting is inscribed HERTZ-MAYER 16. 3. 1888. This represents a late Romanized form of the Oriental Aphrodite, or Astarte, who was especially worshipped in Cyprus. The ram was her sacred animal,

and Astarte herself is sometimes symbolized under the form of a ram, as, for example, on some of the silver staters struck in the fifth century B.C. by the Teucrid Kings of the Cyprian Salamis. It is probable that in its origin this cult was derived from the worship of a sacred ram or sheep *totem*. The cut shows it $1\frac{1}{2}$ times the real size.



20. **Nude figure of Mars** advancing, holding in one hand a trophy and in the other a spear. A similar type occurs on the *reverses* of many Imperial denarii of the first and second century A.D. *Burnt carnelian*.
- 21, 22 and 23 are set in one ring.
21. **Standing figure of Mars** in full armour, holding spear and shield. Dark orange *sard*.
22. **A bird** rudely cut on *amethyst*.
23. **An ostrich**; coarse work on *lapis lazuli*.
24. This gem, a fine piece of *chalcidony*, has a device cut on both sides.
 - (a) **Standing figure of Abundantia** holding in one hand a cornucopiae and in the other some stalks of wheat. At her feet is a corn-measure.
 - (b) On the other side is **a similar female figure**, but without the cornucopiae, possibly representing Annona. In the field is the inscription PANM. Annona was the personification of the year's crop of corn. This conception was at first employed merely as an adjunct to Abundantia and as a symbol of fertility, but by degrees developed into a separate deified personality.
- 25, 26 and 27 are set in one ring.
25. Very rude **figure of a monster**, half human and half fish, coarsely cut on *carnehan*.
26. **A nude figure of a boy**, probably the infant Bacchus, bearing a skin full of grapes on his back. With one

hand he holds a bunch of grapes which a panther at his feet looks up at. Good work on fine orange *sard*.

27. Very rude. **figure of Fortuna** holding a rudder and a cornucopiae; on *carnelian*.
28. **Standing figure of Fortuna** holding a cornucopiae and rudder; very minute work on orange *sard*.
29. **Standing figure of Fortuna** holding a cornucopiae and rudder; rude work on orange *sard*.
30. **Standing figure of Fortuna** holding a cornucopiae and rudder; in the field is a crescent moon and two stars. Good work, boldly executed on *carnelian*.
31. **Standing figure of Fortuna or Abundantia** holding a cornucopiae in one hand and in the other some stalks of wheat and a rudder. Fairly good work on a fine green *plasma*.
32. **Standing figure of Fortuna** holding a cornucopiae and a rudder on *carnelian*. Good work of the first or second century A.D. On the setting is inscribed SMYRNA 1890.
33. **Nude figure of a worshipper** kneeling before Abundantia, who holds a cornucopiae; on red *jasper*. On the back of the gem is cut the word BOHΘEI expressive of a prayer for divine aid.
The extreme frequency of the occurrence of these figures of Fortune and Abundance on Roman gems was occasioned by the belief that the wearer derived good luck and wealth from the use of a signet with these devices.
34. Very rudely cut **female figure seated on a rock**, holding ears of wheat, on *carnelian*. Unset.
35. **Enthroned figure of Cybele** holding a long sceptre and a patera (?). By her throne is a lion. Rude work on orange *sard*.
36. **Standing figure of the Sun-god with radiated head**, holding in one hand an orb and in the other a whip. Coarse work on green *jasper*.

This type occurs frequently on the *reverses* of coins of Constantine and his successors with the *legend* SOLI INVICTO COMITI.

37. **The Sun-god with radiated head** driving a quadriga, the chariot of the sun. Rude work of the fourth century A.D. on a very large yellow mottled *agate*. Mounted in silver as a seal; on the setting is cut MONS PAGUS SMYRNA 1891.
38. **Standing figure of Isis**, holding in one hand a sistrum and in the other a bucket (*situla*); across the field is cut BOM EVT. Good work on *nicolo*. The inscription looks as if it were a blundered form of *Bonus Eventus*, placed by mistake on a gem with a representation of Isis.
39. **Standing figure of Bonus Eventus** holding a cornucopiae in one hand and a patera in the other. Good work on *nicolo*. Unset.
40. **Hercules strangling the Nemean lion**. The hero is nude and has no club or other weapon. Of doubtful antiquity, on *sard*.
41. **Three-quarter figure of the youthful Hercules** holding his club over his shoulder. Of doubtful antiquity, cut on a large orange *sard*.
42. **Standing figure of Hercules** holding a wine-cup with the lion's skin over his left arm, on mottled *chalcedony*; on the back these letters are cut—
 This inscription appears to be unintelligible. The setting is inscribed MAYER.
- BAAA
EICCF
ANGEPO
ZTPQEI
CEKOC
43. **Profile laureated bust of a Roman** wearing a mantle fastened on the shoulder by a brooch; bold work on striated *carnelian*: unset. Broken.
44. **Standing figure of winged Victory** holding a palm-branch and a wreath. Good work on *sardonyx*.
45. **Winged Victory** holding a palm-branch and placing a wreath on a trophy of arms. Very coarse work on *carnelian*.
46. **Winged Victory** standing on the prow of a ship, holding in one hand a palm-branch and in the other a wreath. Behind the ship is a dolphin. Very minutely cut on *agate*.
 This is a late copy of the device on the reverses of coins of Demetrius Poliorcetes, adopted by him in

memory of his great naval victory over Ptolemy Soter I., off the shores of Cyprus in 306 B.C., which gave him command of the Mediterranean sea.



No. 46; one and a half times full size.

The very noble colossal statue, which is represented on this gem and on the tetradrachms of Demetrius, was discovered in 1863 by some French explorers in the island of Samothrace, and is now placed at the top of the principal staircase in the Louvre. It is one of the finest extant examples of Greek art; it is illustrated by Rayet, *Mon. de l'art ant.* Part ii., plate 1. It appears probable that this statue is earlier than the time of Demetrius Poliorcetes, and that he merely re-erected it in a new position in honour of his victory.

47. **Standing figure of winged Victory** holding a palm-branch and a wreath. Minutely cut on mottled *plasma*.

This interesting gem appears to be of Republican date, probably of the second century B.C. It closely resembles the famous gem in the gold ring of Cornelius Scipio Barbatus, consul in 298 B.C., which was found on his skeleton hand when his sarcophagus was opened in 1780. This valuable signet is now among the Percy collection at Alnwick castle.

48. **Winged Victory** advancing, holding a palm-branch and a wreath. Rude work on a thin slice of *garnet*, set with foil behind it.
49. **Three-quarter figure of Mars**, with crested helmet and round shield. Boldly executed work on *carnelian*. On the setting is cut SMYRNA 1890.
50. **Diana** in short tunic, hunting with bow and arrow. At her feet is a running hound. Dark orange *sard*.
- 51, 52 and 53 are set in one ring.

51. **Standing figure of Minerva** with spear and shield.
Coarse work on banded *agate*.
52. **A Faun** holding the pedom, a short curved stick, hunting
with his dog. Red *jasper*.
53. **Standing figure of Mercury** holding a caduceus, rudely
cut on *carneian*.
54. **Standing figure of Minerva**, armed with spear and shield,
pouring a libation on to an altar. Minute work on a
fine *plasma*. On the reverse is cut a lion, walking.
55. **The goddess Roma enthroned**, with spear and shield ; in
her right hand she holds a statuette of Victory on an
orb. At her feet a ship is rudely indicated. Coarse
work of the fourth century A.D. on a large *carneian*.
This common way of representing Roma was adapted
by the Romans from the Greek figures of Athene as she
is represented, for example, on the reverse of the fine
tetradrachms of Lysimachus of Thrace. On the setting
is cut SMYRNA 1890.
56. **Profile bust of Athene or Roma**, with crested helmet,
and with the aegis on her breast. Fine work of Greek
style on a pale *onyx*, with white and yellow layers.
57. **Roma** holding a spear, seated on a heap of armour ; in
front of her is a statue of a male deity on a tall pedestal.
Between the statue and the figure of Roma is a large
serpent. Coarse work on orange *sard*. The presence
of the serpent suggests that this may possibly represent
not Roma, but Athene.
- 58, 59 and 60 are set in one ring.
58. **A gryllus** made up of a scorpion and a mask, on *carneian*.
59. **A locust** cut on white *jasper*.
60. **Standing figure of Aesculapius**, leaning on a staff round
which a serpent is twined. Good work on red *jasper*.
- 61, 62 and 63 are set in one ring.
61. **Minute figure of Aesculapius** leaning on a staff round
which a serpent is twined. Cut on a fine *sardonyx*.
62. **Minute standing figure of Abundantia** holding ears of
wheat and a cornucopiae ; at her feet is a rudder. Good
work on *carneian*.
63. **Profile eiconic bust of a Roman beardless youth with**

filleted head, in armour. In the field are the letters APICTA for Aristarchus. Very fine work on *carnelian*; the head looks very much like a portrait of one of the later Ptolemies: it is not probable that it represents the celebrated grammarian Aristarchus. More probably Aristarchus is the name of the owner of the signet.

64. **Standing figure of Aesculapius** holding the serpent-twined staff; in front of him stands **Hygieia** holding a serpent. Good Roman work on red *jasper*. On the setting is cut SMYRNA 1889.
65. **Standing figures of Aesculapius and Hygieia** as on No. 63. Round the field is cut ΑΛΕΞΑΝΔΡΩΝ (sic), probably indicating that the gem belonged to a man named Alexander. Coarse work on red *jasper*.

In early times the serpent was associated with Asklepios (Aesculapius) to mark his *chthonian* character as a deity who gave help to the sick by means of advice communicated in earth-born dreams. When, however, in the fifth century B.C. Asklepios had grown into a *celestial* deity the serpent was supposed to be a symbol of regained health, on account of its habit of casting its skin every year and appearing with a new skin of fresh and glossy appearance.

II. PROFILE HEADS.

66. Large **head of Juno** wearing a diadem, deeply cut in *jacinth*. A coarse Roman copy of a fine Greek original.
67. **Profile bust of Diana** in brown *sard*.
68. Very graceful **profile bust of Apollo** with long hair, wearing a laurel wreath; in the field is a branch of laurel or olive; finely cut on a yellowish brown *sard*. Of doubtful antiquity, and injured by repolishing. On the setting is cut SMYRNA.
69. **Laureated head of a bearded man** of the Hercules type. Round the field is cut ΘΕΟΓΕΝΗΣ. Pinkish-yellow *agate*. The name is probably that of the owner of the gem, *Theogenes*.
70. **Conventional portrait of Plato** (so called), bearded, with a fillet round the hair. Well cut work on *carnelian*.

71. **Similar portrait head**, but with a laurel wreath instead of the fillet, deeply cut in fine orange *sard*. This supposed portrait of Plato resembles the representations of the Oriental Dionysus and is probably rather an ideal head than a true portrait.
72. **Laureated head of Hercules** deeply cut in a burnt *carne-
lian*.
73. **Laureated bust of a youth** holding a spear, on fine orange *sard*.
74. **Head of the youthful Hercules** with the lion's skin over the back of the head. Coarsely cut in mottled *carne-
lian*.
75. **Laureated head of a youthful deity**, probably Mercury, in dark brown *sard*.
- 76 and 77 are set in one ring.
76. **Laureated head of a female deity**, cut in *chalc-dony*.
77. **Female head**; coarse modern work on *carne-
lian*.
78. **Profile portrait of a Roman lady** with her braided hair wound round her head. Extremely fine Graeco-Roman work of the best period, but injured by repolishing. On *carne-
lian*. This is one of the finest gems in the collection.



No. 79; one and a half times full size.

79. **Profile portrait of Nero and Poppaea** facing each other. Below the busts are the names NEP(ω) and ΠΟΠ(παῖα). Fine work by a Greek gem-engraver on orange *sard*, evidently executed in the lifetime of Nero and his mistress and therefore a gem of exceptional artistic and historical interest. In some cases portraits of revered Emperors such as Augustus and Marcus Aurelius were cut on gems after their death. But the hatred which Nero had inspired and the *memoriae damnatio* which was decreed as soon as he was dead would certainly

have prevented the production of posthumous portraits either of him or of his mistress Poppaea.

80. Large **head of Hadrian** very deeply cut. In front of the face a minute winged Victory is flying, holding a wreath, towards the Emperor. Good bold work on *carnelian*.



No. 81; one and

a half times full size.

81. **Laureated portrait of Caracalla**, crowned by a winged Victory; in the field are the letters $\begin{smallmatrix} H \\ X \end{smallmatrix}$. Bold work on *carnelian*. On the setting is cut SMYRNA 1888.
82. **Two laureated, bearded heads, facing**. Very coarse work on red *jasper*.
83. **Two heads, facing**, very rudely cut on red *jasper*.

III. MISCELLANEOUS SUBJECTS.

84. Minute **head of an old man**, bearded, on *sardonyx*. On the setting is cut *Ruines de Carthage*.
85. **Three Sirens represented as birds with women's heads**, on *carnelian*.
86. Very rudely cut **figure holding a patera over an altar**, on *lapis lazuli*.
87. **Female figure kneeling on one knee**, looking at a circular casket from which some flying object is escaping. On the other side a cloaked male figure leaning on a staff looks downwards at the casket. On each side is a conventional representation of a tree or plant; in the air above is a flying bird. Probably this subject represents Pandora opening the fatal box. *Carnelian*. The setting is inscribed SMYRNA 1890.
88. **The cultus statue of Diana of Ephesus** and a nude male figure with one hand on a tall cippus. With the other hand he pulls his sandal on to his raised right foot. Minutely cut on white *jasper*. The setting is inscribed SMYRNA 1890.

89. **Nude male figure standing**, holding in one hand a patera and in the other a branch, possibly representing Bonus Eventus. Round the field is cut in large coarse letters ΒΕΙΘΥΟC, which is probably the name of the owner of the signet. Good Roman work on *carnelian*.

90. **Bellerophon riding on the winged horse Pegasus**, slaying the Chimaera with a spear. *Mottled carnelian*. The setting is inscribed CASTELLANI 1884.

Castellani is a skilful Roman jeweller and dealer in antiquities, from whom Mr Lewis bought this gem.

91. **Three sacrificial implements**, a jug (*praefericulum*), a *lituus* and a ladle for libations (*simpulum*). At the side is a palm-branch. Round the field is cut in large letters TRVRO. On *sardonyx*, unset.

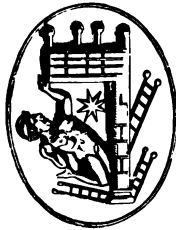
The other implements which are most frequently represented are the *securis*, an axe with which the *papa* slew the victim, the *culter*, a knife for exposing its viscera, the *aspergillum*, a holy-water sprinkler, the *patera*, a deep saucer-like dish for pouring libations, and the *galerum*, the Flamen's cap surmounted by a wooden spike (*apex*). The *lituus* was a short staff with a crook at the end, used by the Augurs to mark out the imaginary divisions of the sky in which they watched for the flight of birds.

These and other similar implements, which occur very frequently on the reverses of Roman coins, were used as the badges or symbols of the various priestly *collegia* of Rome.

92. **Nude male figure** leaning on a cippus and holding a branch in one hand, possibly intended for Apollo. Very minute and beautiful work on a fine green *plasma*. The setting is inscribed SMYRNA 1889.
93. **A hand** holding a branch of a palm-tree and two blossoms of the poppy, cut on orange *sard*.
94. **Mutius Scaevola** in full armour holding his hand in the flame of an altar to exhibit his fortitude to the Etruscan king Porsenna of Clusium. Orange *sard*.
95. **Assembly of seven deities**, seated in a semicircle; between them is an orb. Minute but rude work on *carnelian*. On the setting is scratched VERNON.

96. **A Roman war-ship** with one bank of oars within a wreath of laurel, on *plasma*.
97. **Standing figure of the Oriental Artemis or Moon-goddess** between equestrian figures of Castor and Pollux, each with a star over his head. Coarse but minute work on *carnelian*.
98. **Nude figure of a bearded Dionysiac votary** placing an amphora on a low rock, well executed on olive-green *quartz*, a variety of *plasma*. The setting is inscribed SMYRNA 1889.
99. Very rude **figure of Hercules or Omphale** (?) wearing the lion's skin and holding a club or some other object. Barbarous work on *carnelian*. The setting is inscribed CONSTANTINOPLE 1884.
100. Rudely cut **figure of a helmeted warrior** falling from the walls of a conventionally represented fortress, against which three ladders are leaning; probably representing Capaneus struck by lightning from Zeus while attempting to scale the walls of Thebes. Capaneus was one of the "Seven against Thebes;" see Aesch. *Sept. con. Theb.* 435 to 446. Coarse Roman work on *chalcedony*.

Mr C. W. King's last literary work was a paper on this gem, published in the *Cam. Ant. Soc. Comm.*, Vol. VI., 1888, pp. 378—383.



No. 100; double full size.



No. 101; one and a half times full size.

101. **A winged Victory** fixing a shield on to a trophy of arms; on the other side is a nude figure of a man seated, holding a spear. In the field is coarsely cut $\begin{matrix} \text{K} \text{A} \text{N} \text{I} \text{C} \text{T} \\ \text{O} \text{Y} \end{matrix}$, probably the owner's name, Kallistos. The whole is enclosed in

- a rudely-cut hatched border; on *carneian*. A small piece is missing from each end of this interesting gem. The setting is inscribed SMYRNA 1890.
102. Coarsely cut **figure of a monster or marine deity**; the upper half of the body is human, and the lower half is formed by a fish's tail. On *carneian*.
103. **Two profile heads side by side** of the youthful Hercules and the bearded Hercules with lion's skin over his head. Coarse work on *onyx* of two layers. On the setting is cut CORINTH 4. I 1888.
104. **A nude figure of a youth** seated on a rock under a tree, milking a she-goat. In front is another goat and three kids, all running. Well cut on *carneian*. The setting is inscribed SMYRNA 1884.
105. **Nude figure of a man** working with a hammer on the prow of a ship, representing **Jason** constructing the ship Argo. Well cut on cream-coloured *jasper*. The setting is inscribed MONTIGNY*.
106. **Female figure draped in stola and pallium**, leaning with one elbow on a short column; she holds in one hand an arrow, which she is pointing towards her own breast. Behind her is a tree, and in front a stag looking upwards. This possibly represents Diana. Good Roman work on red *jasper*. The setting is inscribed *Branchidae, March*, 1882.
107. **Scene in the Circus Maximus of Rome**; four bigae are racing round the spina of the Circus, which is decorated with a tall obelisk in the centre and some small aediculae. Minutely cut on *carneian*.
108. **Nude standing figure of a bearded man** who holds in one hand a curved knife; at his feet is a ram. Well executed work on *emerald*. This fine gem appears to be antique in spite of the somewhat unusual use of the *emerald* as a signet stone.
109. **Female personification of the city of Antioch**, seated on a rock with her feet on the figure of a youth swim-

* The celebrated Montigny collection of Gnostic and other gems was sold by auction in Paris in June, 1887. Mr Lewis purchased several other gems from this cabinet; see note on CLASS C, no. 13.

ming who represents the river Orontes. Very deeply cut on red *jasper*.

110. Similar representation of **Antioch and the river Orontes** to that on No. 109. On the dexter side is a standing figure of a Roman Emperor or General in full armour, wearing a wreath; in one hand he holds his sword, and with the other he extends a wreath towards the figure of Antioch. On the sinister side is a standing figure of Fortuna holding a rudder and a cornucopiae. Good Roman work on red *jasper*. The setting is inscribed SMYRNA 1889.
111. **Silenus seated on a rock**, holding a thyrsus; in front of him is a tree growing on a rock. On *sard*.
112. **Sacrificial scene**; two nude Fauns holding the body of a small pig so that its blood drips upon the flame of an altar. Very fine work on *carnelian*; unset.
113. **A Satyr**, horned, with goat's legs, dancing, holding in one hand a caduceus and in the other a wine cup. At his feet is a ram's head. Minutely cut on a *sardonyx* of four layers.
114. **A dancing Faun** holding a pedom, with the nebris hung over his right arm; on *carnelian*; unset.
115. **A Satyr** holding in one hand a pedom and in the other a syrinx or Pan-pipes; on red *jasper*; unset.
116. **A nude Faun** seated on a rock is holding a pig by its hind legs; in front of him is a statue on a tall pedestal. Minutely cut on *carnelian*; unset.
117. **Cupid gathering fruit from a tree**; below is a figure of capricorn, and on the other side of the tree a large crater, out of which is springing a goat and an ear of bearded wheat. On *carnelian*.
118. **Cupid seated on a circular cippus**; by him Psyche with butterfly wings, draped below the waist, is standing. On *carnelian*, foiled.
119. Rudely cut **standing figure of Cupid** on *carbuncle*, hollowed behind.
120. **Cupid** with a long stick is beating down the fruit from an olive-tree, on the upper branches of which a bird is sitting. On red *jasper*.
121. **Cupid** catching a fish with a rod and line, on red *jasper*.

122. **Standing figure of a Roman Emperor** in full armour, holding a statuette of Victory on his outstretched hand. At his feet is a captive in a mournful attitude. Minutely cut on *bloodstone* or green *jasper* streaked with crimson.
123. **Nude standing figure of a youth** holding in one hand a helmet, and in the other a spear and shield; in front of him on the ground is a cuirass. On *carneian*.
124. **Seated figure of Hebe** pouring from an aenochoe into a patera from which Jupiter's eagle is drinking. Well cut on brown *jasper*.
125. **Daedalus seated**, making a wing, on dark *plasma*.
126. **Female figure seated holding a spear**; in front of her is a tripod set on a rock.
127. **Silenus seated on a rock**, with one hand raised to hold a tragic mask on a small column. On *carneian*, unset.
128. Very rude **figure of a worshipper in front of a statue of a deity** on a tall pedestal; on *carneian*.
129. **Prostrate figure of a nude warrior** wounded by a spear in his side; on *nicolo*.
- 130, 131 and 132 are set in the same ring.
130. Rude **laureated head of a youth**, probably Apollo. Behind the head the owner's name PAMPILVS is cut in characters of the second or first century B.C. On brown *carneian*. This is an interesting gem of the Republican period.
131. **An anchor**, poor modern work on brown *carneian*.
132. **A standing figure of Cupid** with a bird at his feet, on *carneian*.
- 133, 134 and 135 are set in the same ring.



133. **A nude figure of a Greek warrior**, wearing only a crested helmet, and armed with a spear; he holds an oenochoe

- to be filled at a stream which issues out of a rock. Good work of Greek style on burnt *chalcidony*.
134. **A crane** standing on a poppy plant, on banded *agate*.
135. **A winged Victory** holding in one hand a wreath and in the other a palm-branch, on *agate* of three layers.
136. **Two draped male figures** stooping to look at a human head which issues from the ground. A necromancer wearing a toga touches the head with his magical wand. On *carnelian*. Good Roman work of the late Republican period. This curious gem appears to represent a Magician raising the spirit of a dead man, as the witch of Endor is said to have raised the spirit of Samuel at the request of Saul; I. *Sam.* xxviii. 7—20.
137. **A Roman shepherd** clad in a tunic leans on his ragged staff in front of a tree, at the foot of which are two goats. Coarse Roman work on *carnelian*.
138. **A Greek warrior**, helmeted and bearing a large round shield, fallen prostrate. Between his legs a serpent is raising its head. This probably represents Philoctetes in Lemnos wounded by a snake in the foot. Early Roman work on *carnelian*.
139. Rude **figure of a nude man** bearing in each hand a tall conical object, on *carnelian*. On the setting is inscribed SOKIA DECEMBER 27TH 1881.
140. **The Vestal Virgin Claudia Quinta** drawing by her girdle the ship which is bringing to Rome a sacred statue of the Oriental goddess Cybele. On *amethyst*. Of doubtful antiquity. On the setting is inscribed HERTZ-MAYER. 16. 3. 1888. This subject occurs on the *reverse* of a fine bronze medallion of Faustina the elder.
141. **A draped male figure** leading a horse behind which is a palm branch as symbol of Victory. Deeply and coarsely cut on *carnelian*. On the setting is cut CHERCHELL XMAS 1888.
142. **Two rudely cut figures, half women and half fishes**, facing each other: above is a star. Barbaric Oriental work on orange *sard*; unset.
143. **Two Greeks**, each armed with a sword, advancing stealthily, looking behind in a nervous manner. One

figure is bearded and wears a chlamys, the other more youthful conspirator is nude. On red *jasper*. This probably represents Harmodius and Aristogeiton about to attempt the assassination of the Peisistratidae.

IV. ANIMALS.

144. **A lion walking**; on brilliant *citrine*. On the setting is cut SMYRNA 1890.
145. **A lion holding a bull's head**; above is a small figure of winged Victory holding a wreath. In the exergue are the letters C·FI· Rudely cut on yellow *jasper*.
146. **An eagle with outspread wings bearing off Ganymede**. Fine work on *carnelian*.
147. **An eagle holding in its beak a wreath**, between two standards; on red *jasper*.
148. **An eagle devouring a hare**. Minute work on pink *carbuncle*.
149. **A cock holding in its beak an ear of wheat**; in front is a rabbit. On orange *sard*.
150. **A cock crowing**, on greenish-blue *jasper*.
151. **An ibis holding in its beak a serpent**; rudely cut on *carnelian*. In the field are the letters A V.
152. A rudely cut **eagle** on *carnelian*: unset.
153. **A bird standing on a stringed instrument**. Very coarse work on *chalcedony*. On the setting is cut DELPHI. I. I. 1888.
154. **A crow or raven standing on a branch**, on *sardonyx*.
155. **A bird flying over a running dog or wolf**; rudely cut on the curved surface of a striated *agate*.
156. **A dog and a dolphin**; in the field above is cut IACΩ; coarse work on red *jasper*. The letters stand for one of the mystic Gnostic names of the Supreme Deity.
157. **The wolf with the twins, Romulus and Remus**; minutely cut on fine red *jasper*.
158. **A running panther** on green *chalcedony*.
159. **The winged horse Pegasus** at full speed; well cut work on a fine *plasma*.

160. Very rude **figure of a horse**, mostly executed with the blunt drill (*retunsum*). Coarse work of the third or second century B.C. on *carneian*. This gem resembles in style the latest Etruscan scarabs; see pages 32, 33.
- 161, 162 and 163 are set in one ring.
161. **Head of Serapis** with the modius on his head, on *blood-stone jasper*.
162. **A butterfly hovering over a rat**; in the field is cut the owner's name BASSI, meaning [the signet] of Bassus; good work on black *jasper*.
163. **A man galloping on horseback**, minutely cut on red *jasper*.
164. **A man kneeling and feeding a horse** from a basket, on burnt *chalcidony*.
165. **A horse grazing**, on *carneian*.
166. **A wild boar running**; in the field is the owner's name Certus, thus ^{CER}_{TVS}; on *carneian*.
167. **A bull galloping over a serpent**; very good work on *carneian*; unset. This was possibly the signet of some member of the Gens Thoria, who used the bull (*taurus*) as a sort of heraldic "canting" badge. A similar running bull occurs frequently on denarii struck by monetarii of the Thoria family.
168. **A ram's head** finely cut on *sardonyx*.
169. **A fly and a trefoil leaf**, finely cut on *onyx* of three layers; unset.

V. EGYPTO-ROMAN GEMS.

170. **The sacred bull Apis** wearing the sun-disc or orb between his horns; minutely cut on *onyx*. In an ancient gold ring setting.
- The bull Apis was regarded as an earthly incarnation of Osiris, and in later times was revered as a form of the Sun-god Ra.
171. **Busts of Isis and Serapis**, set facing; between them is a caduceus. Good work on *carneian*.
172. **Bust of Serapis**, coarsely cut on *citrine*.

173. **Bust of Serapis or Jupiter Ammon**, radiated, with rams' horns, and the modius on the top of his head. In front, in the field, is a serpent wound round a trident. Good bold work on *carneian*. On the setting is cut SMYRNA 1890.

Serapis or Sarapis was a late form of the early Egyptian god Osiris, whose conception was amalgamated in Ptolemaic and Roman times with that of the Greek Zeus and the Latin Jupiter, and also with that of the sun-god Ammon-Ra. The *modius* or wheat-measure on his head records the original character of Osiris, who was primarily a god of the crops. This important fact was first pointed out by Mr J. G. Frazer, in his valuable work *The Golden Bough*, 1890, Vol. i., page 301 seq.

174. **Bust of Jupiter Serapis**; in the field are the letters AP or PA in a monogram followed by A·Y·N.
175. **Small bust of Serapis above an eagle with outspread wings**; at the sides of the bust are a star and a crescent moon. Rude work on *carneian*.
176. **Figure of Isis** holding the sistrum, in front of the Pharos at Alexandria. Coarse work on *carneian*. On the setting is cut SMYRNA 1890.
177. **Standing figure of a male deity** wearing only a chlamys over his shoulder; in one hand he holds an orb, in the other a branch of a tree, towards which an infant at his feet is reaching his hand. On the head of the deity is the triple crown of asps. This curious figure probably represents the sun-god. It is well cut on black *jasper*.
178. Rudely cut **male bust between a star and a crescent moon**. Coarse work of the third or fourth century A.D. on orange *sard*. On the setting is cut BAGHDAD 1881.
179. **Bust of Horus (the Greek Harpocrates)** with finger pointing at his mouth as the emblem of silence, well cut on *sardonyx*.
180. Rudely cut **bust of Isis** crowned by three lotus blossoms, on *sardonyx*.
181. **Symbolical bust of Egypt wearing the skin of an elephant's head**; finely cut on *sardonyx*.

CLASS C.

GNOSTIC GEMS AND TALISMANS.


1. Oval tablet of *lapis lazuli* in ancient bronze setting with ring for suspension. On one side is a **figure of Horus (the Greek Harpocrates)** holding a flail, seated on a lotus blossom. Below is the mystic word ABPACÆ and the letter Ω. On the other side is rudely cut ΑΔΩΝΑΙ ΜΙΧΑΗΛ the common Gnostic (Hebrew) formulae for the Supreme Being and Michael, one of the Angels of the Aeons*.

The letters of ABPAΞΑΣ or ABPAΣΑΞ (as Greek numerals) make up the number 365. According to the Gnostic creed there were 365 orders of angels, each of which occupied a separate heaven; each heaven being superior to the one below and inferior to the one above it. It was especially the followers of the Gnostic Basilides who used this mystic word, denoting the whole Hierarchy of Heaven, and also the supreme Ruler of the universe. The Abraxas deity is frequently symbolised by a human figure with a cock's head and serpent legs; this type is intimately connected with the sun-god Mithras. The name and symbol of Abraxas were supposed to have great talismanic powers, protecting the wearer from disease, accident and misfortune generally. Its medical virtues, when cut on the right stone, were very highly valued and believed in for many centuries; to a great extent even throughout the mediaeval period. Though it was contrary to canonical rules many Bishops and Archbishops, especially in the eleventh to the thirteenth century, were in the habit of wearing an ancient Gnostic gem with the Abraxas deity or the sun-god Chnoubis in their episcopal ring. Such gems were also frequently set round the knop of episcopal croziers.

2. **Horus (Harpocrates)** seated on a lotus blossom with his




* For further information about the Abraxas and other Gnostic deities, see C. W. King, *The Gnostics and their Remains*, London, 1887; and Dieterich, *Abraxas, Studien zur Religionsgeschichte*, Leipzig, 1891.

finger on his lips holding a flail ; in front is the letter K. Some obscure Gnostic symbols are cut on the reverse. On *bloodstone*.

3. Rudely cut **figure of Horus**, with his finger on his lips, seated in a throne ; in front, in the field, is inscribed MICMOC. On the reverse are some coarsely cut Gnostic letters. On black *jasper*.
4. **Horus (Harpocrates)** seated on a lotus blossom issuing from a boat ; he holds a cornucopie in one hand and lays his finger on his lips. On fine black *haematite*, with a hole drilled through the top for suspension.
5. **The Sun-god Chnoubis as a serpent with lion's head, radiated ;** on fine green *plasma*. On the reverse is the hieroglyph  above the name XNOYBIC.

The whole is a common type of Egyptian gem during the Roman Gnostic period, 3rd and 4th centuries A.D. The name of this deity is written variously as XNOYΦΙΣ, XNOYΜΙΣ and ΚΝΗΦ : he appears to be a late development of the early Egyptian deity Chnemu, the World-Creator or Moulder. He is called "Maker of all things that exist, Creator of things that are, the origin of evolutions, the father of fathers and mother of mothers." He is also "Father of the gods, moulder of men, begotten of the gods, maker of Heaven and Earth and Hell, of water and mountains."

In later times Chnemu became associated or identified with the sun-god Ra and with Osiris. With the Gnostics he was a form of Hor-Apollo—the Demiurgos or Spirit which "pervades the universe."

6. **The Sun-god Chnoubis** as on No. 5 ; in front is cut ΙΘΙ-ΙΘΙ. On the reverse is the symbol  and round the edge a long Gnostic inscription with mystic names. On green *plasma*.
7. **The Sun-god Chnoubis** as on Nos. 5 and 6. On the reverse is the symbol , round which there is an inscription with mystic names. On *chalcedony*.
8. **The Sun-god Chnoubis as a lion-headed serpent.** On the reverse is the symbol  and the mystic name ABPACAΞ. On *chalcedony*.

9. The Sun-god as a serpent with the head of a bearded man; round it are five stars and a crescent moon. Well cut on *carnehan*. On the setting is engraved MONTIGNY.
10. **Two lions at the foot of a palm tree**; above each lion is a star. On the back is cut a long list of the mystic Gnostic names for God, together with a small eagle and a figure of the solar deity holding a flail. Rudely cut for a talisman on a large oval piece of *chalcedony*, with both sides convex.
11. **The Gnostic Anubis as a man with jackal's head** stands, holding a sistrum and a situla. A jackal stands by him on its hind legs with one paw on his shoulder. On red *jasper*.
12. Minute **figure of Horus (Harpocrates)** as on No. 5, seated on a lotus blossom which issues from the sacred boat of the sun, below which are three crocodiles. Above Horus are three scarabaei beetles, and on the dexter side three goats and on the sinister side three eagles. On the reverse is a Gnostic inscription. Very minute work on dark green *jasper*.
13. Oval talisman of mottled *chalcedony*: on one side is **the Abraxas deity** as a man with a cock's head and serpent legs, holding in one hand a shield on which is inscribed the Divine Name ΙΑΩ, and in the other hand a flail.



No. 13; real size.

On the back is a list of mystic Gnostic names—ΜΙΧΑΗΛ — ΓΑΒΡΙΗΛ — ΟΥΡΙΗΛ — ΡΑΦΑΗΛ — ΑΝΑΝΑΗΛ — ΠΡΟ-
 CΟΡΑΙΗΛ — ΥΑΒCΑΗ, Michael, Gabriel, Uriel, Raphael,
 Ananael, Prosoraiel, Uabsae (Absael), the Angels in
 charge of the seven aeons.

This talisman, together with Class B, no. 42 and Class C, nos. 9 and 18 were purchased by Mr Lewis at the sale of the Montigny collection of gems in Paris, June, 1887. An interesting paper on these four gems was published by Mr C. W. King in the *Cam. Ant. Soc. Comm.*, Vol. VI., 1887—8, pp. 347—354; but owing to the author's failing eyesight his descriptions are in some respects not correct.

14. Circular talisman of black *jasper*. On one side is **the Evil Principle of Nature or Typhon** as a man with serpent legs and lizard's feet for hands. On the dexter side is the inscription NTΣ, on the sinister side a scorpion and below, a phallus. On the reverse is a **skeleton holding a staff** seated under a tree, on the ground is a butterfly; the whole is enclosed by a serpent. The devices cut on this stone made it an amulet with great magical powers of prolonging life and bringing good fortune.
15. **The Abraxas delty** as a man with ass's head, and forked serpent legs, holding a dagger and a shield; round it are the letters ΔΩΙΦΠΔ. Good work on green *jasper*.
16. Large oval talisman of black *jasper*. On the face is cut a **standing figure of a man** closely swaddled in mummy-like drapery. On his head is a serpent. All round are cut numerous mystic Gnostic words. On the back is cut HAIH A good example of late Gnostic work, AB...Ω dating probably not earlier than the fifth
Λ⋈ V century A.D.
IAN
17. Large oval talisman of red *jasper*, convex on one side and flat on the other. On the convex side, **the Abraxas delty** with cock's head and serpent legs as on No. 13, holding a shield and a flail. Round it are a number of mystic Gnostic words. On the reverse is **the sun-god Chnoubis** as on No. 5, surrounded by three scarabaei, three eagles, three serpents, three crocodiles, three goats and a star. This is an exceptionally fine specimen of a Gnostic magical talisman. It was bought by Mr Lewis from M. Feuardent, who obtained it from Bombay. A

paper on it by Mr C. W. King is published in the *Cam. Ant. Soc. Comm.*, Vol. v., 1880—4, p. 8^{seq.}

8/



No. 17; real size.

18. Small oval slab of dark grey *jasper*. Within a border formed by a serpent with its tail in its mouth the oval space is divided by a cross into four quarters containing **Horus on the lotus, a lion, a cock and a scarabaeus beetle**. On the reverse are the letters CEM, of doubtful meaning; and on the bevelled edge ECIA of the amulet is inscribed AËHNAPIN which, AMY like the main inscription, appears to be unintelligible.
19. Minutely cut **figure of Jupiter Serapis enthroned**, with a lion or Cerberus at his feet. In front of him stands Isis holding a long torch and some ears of wheat. On the reverse are some Gnostic symbols. On red *jasper*.
20. **Male bearded, laureated head**; above is a serpent issuing from the cista mystica. In front are some Gnostic names of God, reversed on the gem, so as to read right on the impression. A This is meant to be read in various directions I
—'O'Ων the Being, Lord of CAB
Sabaoth, God. On *carnelian*. OΩN
EOH
Y

As Gnostic gems were usually talismans rather than signets, the inscriptions on them most frequently read

right on the stone itself ; on other gems the inscriptions are usually reversed so as to be read on the impression.

21. **A silver signet**, unset, **engraved with a bust of Jupiter Serapis, radiated** ; in front is a serpent wound round a trident, and over it a crescent. On the reverse is cut a number of mystic Gnostic words. IABAIAOP
This is a very fine example of ΘONATHCAAI
a metal signet, with a nobly AIBAΘI
designed head, of the first or Λ A M
second century A.D. ; it is of A Ω
Graeco-Egyptian style.
22. **A finely cut scorpion** ; on the reverse is in- ΩIBMENX
scribed this form of magical words— EINIAMB
On yellow *jasper*. ΩN
23. **A scorpion** round which are some rudely cut letters or symbols ; on *carneian*.

II. GRYLII.

Pliny, *Hist. Nat.* XXXV. 114, uses the word *gryllus* for a class of grotesque figures first used in painting by Antiphilus of Alexandria. The word also means a cricket, but is commonly used to denote any grotesque monster which is made up of several masks or portions of different animals.

Under the later Roman Empire and even as early as the first century A.D. these ingenious combinations of various birds and beasts were commonly used for signets of an inferior class.

24. Gryllus head very ingeniously made up of three faces and an eagle's head ; fine bold work on red *jasper*.
25. Gryllus head made up of a cock standing on a serpent, a male bearded mask and another bird ; coarse work on red *jasper*.
26. Gryllus head made of a crow standing on a serpent, a bearded mask, a goose, and minute heads of a ram and a lion, all combined in a most ingenious way to form

one bust. In front is ΕΥ. Good work on *carneian*. On the setting is cut CAESAREA CAPP 1841.

27. A monster made up of an ostrich and a bearded mask. Round it is inscribed ΔΠΤΕΦ. Rudely cut on a convex piece of *chalcedony*.
28. Gryllus, made up of a mask and the fore part of a horse; behind is a helmeted male head, a dolphin and a ram's head. On fine red *jasper*.
29. Gryllus monster, made up of a bearded mask, a ram's head and a horse's head. Coarse work on *carneian*.
30. Gryllus made of a bearded mask, a horse's head, the hind parts of a griffin and the legs of an ostrich; on red *jasper*.

CLASS D.

ORIENTAL GEMS.

1. **Babylonian cylinder** cut in *haematite* with a fine metallic lustre. On it is engraved the solar deity seated in a throne holding in one hand a small cup; above is a star and crescent. In front of the deity are two standing figures of worshippers, and close by his knees there is a small grotesque figure. This signet probably dates from about the twelfth to the tenth century B.C.; it is much worn with long use. The cylinder is pierced longitudinally to receive a cord by which it was fastened round the wrist or hung from the neck.
2. **An Assyrian king strangling a lion**, as symbol of royal power. Good work of about the eighth century B.C. on green *jasper*.
3. **Persian scarabaeoid** rudely engraved with a winged lion, above which is a human head and two symbols, within a plain line border. On *chalcedony*, pierced; unset. Probably of the second or third century B.C.
- 4 to 7 are **large annular signets** in *chalcedony* of Sasanian workmanship, all rudely cut, and dating from the third to the fifth century A.D. Unset.
4. Doubtful symbols.

5. A winged griffin.
6. An eagle displayed.
7. A rudely cut human head.
- 8 to 13 are rudely cut **hemi-spherical Sasanian signets**, pierced for suspension: the first four are in *bloodstone*, the last two in brown *haematite*; unset.
8. Two rude standing figures.
9. A horse.
10. A winged horse.
11. A lion springing upon an ibex.
12. An animal of doubtful form, very rudely cut.
13. Two rude figures of birds.
14. **The humped Oriental ox**, rudely cut on a pale *sard*; Sasanian; unset.
15. **Bust of a Sasanian king** inscribed with a Pehlevi inscription on *carnelian*; unset.
16. Large oval signet with **a bust of the Sasanian king Sapor the Great**, the conqueror of the Romans in the



No. 16; real size.

fifth century A.D. He wears the royal head-dress, necklace and ear-rings, and has long curled hair. In front is a Pehlevi inscription giving his titles as "King of Kings, Lord of the Kings of Irun." Good characteristic Sasanian work on *carnelian*.

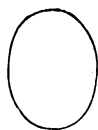
17. **An eagle sitting on a camel**, late Sasanian work on white *jasper*. In front is an inscription.
18. **Phoenician scarab** with a rudely cut seated figure of a Sphinx, in *carnelian*. Probably from Tharros in Sardinia; of the third century B.C. This is a very characteristic example of a Phoenician scarab of the later type during the period of decadence.

19. **Cultus statue of Apollo** in the great temple at Branchidae in Ionia; on *carneian*. Apollo is represented nude, standing, holding in one hand a bow, and in the other a stag, by its fore legs. The original of this very famous statue was by Kanachos of Sicyon, in bronze, of about 500 B.C. It is described by Pliny, *Hist. Nat.* XXXIV. 75. See *Proceed. Soc. Ant.* Vol. XI, p. 253 seq. and Middleton, *Ancient Gems*, p. 42.

CLASS E.

CHRISTIAN GEMS*.

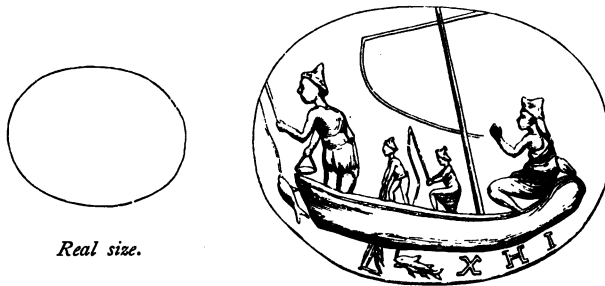
1. Very rude representation of **the Crucifixion**, with two figures standing by; one is Longinus with the spear that pierced Christ's side. The figure of Christ is draped in a long tunic and the head is nimbed. Coarse work on green *jasper*, possibly as early as the fifth century A.D.

*Real size.*

This curious gem is of exceptional interest from its affording one of the earliest known representations of the Crucifixion. As is mentioned above in the note on CLASS A, No. 48, representations of Christ's death and sufferings very rarely occur till after the time of Justinian, the sixth century A.D.

* The finest Christian gem is catalogued above in CLASS A, No. 48.

2. **A ship** with one mast and a large sail in which are three men fishing with rod and line and one drawing in a net.



Below are the letters IHX for ΙΗΣΟΥΣ ΧΡΙΣΤΟΣ. Rude work on *chalcedony**.

3. **Two draped standing figures holding palm-branches**; one of them holds also the *labarum*, Constantine's standard, on which is the sacred monogram $\chi\rho$. Minutely cut on red *jasper*.
4. **Male figure dressed in a tunic**, holding the sacred monogram $\chi\rho$, and trampling on a human-headed serpent with forked tail, symbolising the triumph of Christianity over the Principle of Evil. Good work on *lapis lazuli*, probably executed in Egypt during the fourth century A.D.
5. Very rude **nude figure armed with spear and sword** on *carnelian*, chipped. Set in a mediaeval silver ring; round the bezel is cut an inscription in rude letters, perhaps the owner's name—MANOΛITZANETHHTΘ (*Manolitsa Netetou*?). The back of the bezel and the shoulders of the hoop are decorated with *niello* inlay.
6. **Standing figure of the Good Shepherd** bearing a sheep on His shoulders. He wears a tunic and high boots. To the back is cemented another gem with three standing figures. Both are cut in *carnelian* and are modern copies of two ancient gems. With it is an electrotype impression.

* A paper on this curious gem and the preceding one was published by Mr C. W. King, *Camb. Ant. Soc. Comm.*, Vol. v, 1880—4, pp. 1 to 4.

- 6 A. Electrotpe copy of a gem with a **figure of the Good Shepherd** bearing a sheep. On each side is the symbol ☩.
7. Rectangular bezel of a bronze ring on which is incised a dove and the monogram ☩, of the fifth or sixth century A.D.
8. Fragment of blue glass, probably from a ring, on which is impressed in relief the monogram ☩. This probably came from one of the Roman Catacombs.

CLASS F.

PASTE GEMS.

1. **Atlas** kneeling on one knee supporting a globe, on fine *blue paste*.
2. **Dancing girl** dressed in a short tunic, with both hands to her breast; on *black paste* with a white stripe.
3. **Apollo** standing by a tree holding his lyre; at his feet is a figure of Cupid; fine Graeco-Roman work on *yellow paste*.
4. **Barbaric profile bust of a king** with radiated crown, on pale *green paste*; modern.
5. **Full faced head of Hercules** in "black jasper" *paste*; made in the eighteenth century by Wedgwood as a fob-seal.
6. **Standing figure of Aesculapius** with a serpent and holding a patera; on pale *blue paste*.



No. 7; one and a half times full size.

7. Fine **profile portrait of the Empress Domitia** on *yellow paste*; fine Graeco-Roman work of the best style.
8. **A winged griffin** holding a branch in its paw; on *blue paste*. Probably Phoenician work of the fifth or fourth century B.C. Pastes of this type have been found in

Rhodes and in Cyprus, and also in other places where there was commercial intercourse with Phoenicia or its colonies.

9. **Nude figure of a warrior**, holding a shield, standing in front of a column, on which is an owl; a serpent is twined round the column. Probably Greek work of the fifth or fourth century B.C., on *yellow and white paste*.
10. **A Siren, as a bird with human female head, helmeted**. Behind are two spears and a shield on which is a head of Medusa. On *pale blue paste*.
11. **Standing figure of a Siren**, as a bird with a woman's head, playing on the double pipes. In the field are the letters LIHI. On *purple paste*.
12. **Jason working with an adze on the prow of the ship Argo**, on *pale yellow paste*; this is a favourite subject in Graeco-Roman art.
13. **Nude standing figure of a Faun** pouring wine from one amphora into another. Minute work on *pale yellow paste*, of good Graeco-Roman style.
14. **Profile conjugated heads of a Roman Emperor with laureated head and a lady**. Fine modern work on *pale yellow paste*, of very minute execution.

CLASS G.

CAMEOS.

1. Thick disc of *chalcidony*, two inches in diameter, with a **Cupid's head** in high relief, with four holes for attachment. This is a fine example of the *phalerae*, large boss-like gems, which were inserted in the bronze cuirasses of Roman Emperors, and were granted as special distinctions to victorious generals; date probably the first century A.D. Unset.
2. Large oval cameo in an *onyx* of two strata, with a grotesque **mask of a Satyr**, combined with two dolphins, an eagle's head and a lion's head. Good Renaissance work; probably Italian of the sixteenth century. Set in a twisted gold frame.

3. Oval cameo in *onyx* of three strata with **the infant Hercules** strangling the serpents which attacked him in his cradle. Good Italian work of the sixteenth century. Bought by Mr Lewis from Captain Peel's collection for £13, Feb. 21, 1882. Set in a gold ring.
4. Modern cameo on *onyx* of three strata, engraved on one side with a **nude seated figure of a sleeping Nymph**, and on the other side with **Pan seated on a rock**. Unset.
5. **Two nude Nymphs worshipping a statue of Priapus**; good modern work on *onyx* of three strata. The figures are cut in a stratum of *red jasper* on a ground of *yellow jasper*. Unset; good eighteenth century work.
6. Cameo with a similar design to that on no. 5, cut on *onyx* of two strata, white on a blue ground. Good modern work, set in a gold ring.
7. Oval cameo on *onyx*, with a white layer on a ground of transparent chalcedony. **A nude figure of a god seated on a rock**; by him is Cupid. In front of him is a seated figure of an old man, behind whom a female is standing. Modern work, unset. Broken and mended.
8. Long oval cameo on *onyx*, with cream-white layer on a transparent ground. **Amphitrite and Triton with attendant sea-gods** floating on the sea. Modern work, unset. Broken and mended.
9. Grotesque **profile head of a Faun**, cut in mottled *agate*; modern. Set in a gold ring.
10. **Turretted head of the Tyche** or personification of a city; modern work on *onyx*; set in a gold ring.
11. Oval cameo in green *jasper* with a **half length figure of Christ in Majesty**, of Byzantine style, nimbed and holding in one hand an orb; the other hand is raised in blessing, with three fingers extended after the fashion of the Greek Church. The cross on the nimbus is inscribed O ΩΗ for 'O 'Ων, *The Being*. At the sides are the letters IC XC (ΙΗΣΟΥΣ ΧΡΙΣΤΟΣ). Greek work of about the fifteenth century, well executed. In a twisted gold frame.

CLASS H.

MODERN GEMS*.

1. **Heads of Diana and Apollo Helios**, facing, on red *jasper*.
2. **Bust of Athene** on *onyx*, copied from an ancient gem.
3. **Head of Medusa**, full face, on red *jasper*.
4. **Head of Medusa**, full face, on dark brown *paste*.
5. **Head of Medusa**, full face, on *bloodstone jasper*.
6. **Profile head of Medusa** on *carnelian*.

These four heads of Medusa are all copied from ancient gems.

7. **Profile head of a youth**; in front is a vine leaf, and behind, the letters HMVIS; on red *jasper*.
8. **Profile bust of Apollo Helios**, on green *jasper*.
9. **Fine profile head of a Roman Emperor** on yellow *paste*; unset.
10. **Profile bust of a bald, bearded man**, probably meant for a Greek philosopher, inscribed CEI TA. On pink *paste*.
11. **Profile head of a bearded Philosopher** on orange *sard*.
12. **Nude standing figure of Heracles** with club and bow, within a hatched border; on green *jasper*; unset.
13. **Three Greek warriors in full armour**; one of them stoops to draw a lot out of an amphora; behind is a column; on *carnelian*. This is a copy of a not uncommon design on Graeco-Roman gems; the subject is supposed to be the Herakleidae drawing lots for the division of the Peloponnese.
14. **Graceful seated figure of a Greek lady**, draped below the waist. Very beautiful work on *citrine*, set in silver as a seal.
15. **Minute standing figures of Aesculapius and Hygieia** on *carnelian*; on the reverse is a female head.
16. **Nude standing figure of a Greek warrior** to whom a fully draped female offers three poppy blossoms; behind

* Only those gems which are clearly and obviously modern are placed in this class. A good many which are possibly modern are included in the previous classes.

are three male figures bending in attitude of supplication. Very minute work on *sapphirine chalcedony*.

17. **Nude figure of Meleager** holding two spears, standing in front of a statuette placed upon a rock; at his feet are two hounds; on *sapphirine chalcedony*. This is a copy of a fine Graeco-Roman design, of the same class as the Vatican statue of Meleager.
18. **Standing figure of Bellerophon** watering his horse Pegasus on the Acro-Corinthus: good copy on yellow *paste* of a large Graeco-Roman relief in marble which is now in the Capitoline Museum in Rome.
19. **Aeneas escaping from Troy** with his father Anchises on his shoulder, and leading the boy Ascanius, rudely cut on red *jasper*. The setting is inscribed SMYRNA 1890.
20. The same subject as the last on *nicolo*.
21. **Faustulus discovering the twins Romulus and Remus** suckled by the she-wolf under the Ficus Ruminalis, deeply cut on *carbuncle*. This is a copy of an ancient Roman gem.
22. **Enthroned figure of Cybele** holding the statue of Diana of Ephesus; at her feet is a lion, and, behind her throne, a peacock, on *carnelian*.
23. **Seated figure of a pseudo-Egyptian deity**, a very clumsy forgery on banded *agate*.
24. **Nude figure of Apollo** holding a fawn, and two female deities standing side by side, on red *jasper*.
25. **Heraldic monster** formed of two birds with one human head, on green *jasper*.
26. **A large crater on which is a man driving a biga**, on orange *sard*.
27. **Standing figure of Omphale** with the club and lion's skin of Hercules; signed in Greek letters ΠΙΧΛΕΡ. This is the usual signature of *John Pichler*, one of the best gem-engravers of the eighteenth century. On *carnelian*; set in gold as a seal.
28. **Pseudo-Egyptian figure of a man in a boat**, on brown *jasper*.
29. **A helmet** with two plumes and cheek-pieces, on *carbuncle*.
30. **Draped female figure holding a ball and a spear**, pro-

bably meant for Atalanta; at her feet is a small Cupid, on bloodstone *jasper*.

31. **Male head** above a bell, a balance and two ears of bearded wheat on orange *sard*.
32. **Standing warrior**, fully armed, in front of a pedestal on which a bird is sitting; on pale red *jasper*: a coarse copy of an ancient gem.
33. **Two Cupids in a ship in the form of two dolphins**, with mast and sail; minutely cut on black *jasper*.
34. Copy in pink *paste* of a fragment of a gem with a **figure of the Good Shepherd**, bearing a sheep on His shoulders. On each side was a tree, and at His feet some sheep, partly broken away.
35. Copy of **Greek scarab** in hard opaque brown *paste*; on it is **Herakles** strangling the Earth-born Giant Antaeus.
36. **Silenus with a thyrsus** kneeling by the side of a Centaur who is in a recumbent position and is dipping one arm into a large wine-jar or crater. Good work on green *plasma*. This appears to be a fine work of the Renaissance period, possibly copied from a Graeco-Roman original.

CLASS J.

ANTIQUÉ RINGS.

1. Ring wholly of pure gold; on the bezel is cut a **draped female figure** holding a wreath. Much injured by wear. This fine ring appears to date from the Early Empire, but it may possibly be of Greek workmanship.
2. **Profile head of a Roman lady**, well and minutely cut on *carbuncle*, dating from the first century A.D. It is set in a gold ring with open shoulders; the aperture is decorated with a gold twist. The ring setting is several centuries later than the gem.
3. **Ajax, as a nude helmeted warrior, is dragging away Cassandra** from her refuge in the Trojan temple of Athene. Rude Roman work on red *jasper* in its original setting, a bronze ring plated with gold. The date of this ring is probably the second century A.D.

4. Rudely cut **head of Apollo** on *carnelian* in its original setting, a hollow gold ring, of late Roman date.
5. **Standing figure of a Tragic actor** holding a long sceptre; in front is the inscription ΕΡΜΗ; on *carnelian* in a massive gold ring setting, which appears to be of the fourth or fifth century A.D. The gem is earlier in style than the ring.
6. **Bust of Jupiter Serapis** on *sardonyx* in its original bronze ring setting, probably of the second century A.D.
7. **Minute head of a helmeted warrior, possibly Mars**, on green *jasper*, in its original setting, a plain hollow gold ring of the second or third century A.D.
8. Very rude **figure of Cupid standing**, on *carnelian*, in its original setting, a plain hollow gold ring, intended for a lady, as the opening is very small. Late Roman work.
9. **Two minute figures of Cupids playing**, on *carnelian*, in its original setting, a small, plain gold ring, made hollow. Late Roman work.
10. **Two birds above a ship** with one bank of oars, rudely executed in dark *paste* with a blue layer. Set in a silver ring of the fourth or fifth century A.D. The shoulders of the ring are flattened and enlarged into two oval discs.
11. **Seated figure of a Nymph or Muse** holding on her knee a Tragic mask; on *carnelian*, set in a plain bronze ring, the hoop of which is lost. Probably of the second century A.D.
12. Small and rudely cut **head of Apollo Helios**, with radiated head, on *carnelian*, set in the original hollow gold ring, of the second or third century A.D.
13. **Bust of the youthful Hercules** with a club on his shoulder; coarsely cut in red *jasper*, in its original solid gold ring setting, of the second century A.D.
14. Small and very rude **standing figure**, on *onyx* of three layers, set in a massive gold ring with fluted shoulders; of late Roman date.
15. Ring wholly of silver; of doubtful date; on the bezel is engraved a winged griffin; the shoulders of the ring are decorated with a sort of diaper pattern.

16. Hoop-ring of massive gold, slightly polygonal in form; on it is cut in large letters ΕΠΑΓΑΘΩ—ΕΛΕΙΚΩΝ, "For a blessing, Eleikon [dedicates this.]" This interesting ring was probably a votive offering, dedicated in the temple of some pagan deity, in the third or fourth century A.D.
17. Gold ring formed by bending round a wide plate of gold. On the widest part of the bent plate is incised an anchor and the word ^{OMO}NOIA, *unity*; this is probably a betrothal or wedding ring.
18. Bronze ring, on the bezel of which is engraved a very rude figure with radiated head and some letters or symbols of doubtful meaning.
19. Bronze Christian ring, with a large rectangular bezel on which is incised ^{VIVAI}IN DEO. This is reversed on the ring itself.
20. Large bronze Christian ring with a rectangular bezel, on which is inscribed ^{SPES}IN DEO. The letters are in relief, not incised as on No. 19; they are reversed so as to be read on the impression SPES IN DEO. Part of the hoop is missing.
- 21 and 22. Two gold rings from tombs in Egypt of the Ptolemaic period; they are formed in the shape of serpents wound spirally round the finger. This is a very frequently occurring design for rings of the Greek period both in Egypt and elsewhere.

FINIS.

MAY 31 1916

